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ABSTRACT

The publicly available statistical information on U.S. public school districts to date has been limited to certain demographic characteristics of districts, student enrollment and racial composition, and the numbers of teachers. To enlarge this fund of knowledge, information on the variety of attributes, policies, and practices of public school districts in the United States is presented here. The report draws on data from a nationally representative survey of schools, teachers, principals, and public school districts. The topics covered here include geographic and demographic characteristics, the number and racial composition of students and teachers, the number and qualification of new hires, hiring criteria, teacher demand, and district efforts to recruit and retain teachers, teacher compensation and incentives, programs and services provided by the district, district graduation requirements, and other student policies. Within each of these topic areas, school districts are compared across three demographic and two geographic characteristics in the hope that local educators and policymakers can use the information to compare the situation in their school districts with similar types of districts nationally. The report does not assume any statistical expertise on the part of its readers and graphs are used extensively in each chapter to explicate the findings. A highlight of the survey's findings are presented at the front of the report. (RJM)

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Public School Districts in the United States

A Statistical Profile, 1987-88 to 1993-94



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NATIONAL CENTER FOR EDUCATION STATISTICS

Statistical Analysis Report

February 1998

Public School Districts in the United States

**A Statistical Profile,
1987-88 to 1993-94**



Roger Levine
Bruce Christenson
American Institute for Research

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National Center for Education Statistics

**U.S. Department of Education
Office of Educational Research and Improvement**

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Highlights

The primary data sources for this report are the Teacher Demand and Shortage (TDS) Questionnaires from the 1987-88, 1990-91, and 1993-94 Schools and Staffing Surveys (SASS). These data are used to discuss various attributes, policies, and practices of public school districts. When possible, findings from 1993-94 are compared with those of previous years. Highlights are summarized below.

Characteristics of Public School Districts

- In 1993-94, only 4 percent of school districts were located in urban areas inside central cities. These urban central city districts were responsible for the education of 25 percent of the nation's public school students. Conversely, over half (56 percent) of all school districts in 1993-94 were found in nonurban areas. These nonurban school districts were also responsible for the education of 25 percent of the nation's public school students (figure 1.2).
- In 1993-94, districts with fewer than 1,000 students comprised 51 percent of all public school districts but accounted for only 7 percent of the total kindergarten through 12th grade enrollment in public school districts. Districts with 10,000 or more students made up only 5 percent of all school districts and served 46 percent of all kindergarten through 12th grade students enrolled in public school districts (figure 1.4).
- School districts with 10,000 or more students accounted for nearly one-tenth of the districts in the South and West (i.e., 9 percent and 8 percent, respectively) in 1993-94 as compared with only 2 percent of districts in the Northeast and Midwest (figure 1.5).
- In 1993-94, three-fifths (61 percent) of the nation's public school districts had predominantly white student populations in which fewer than 10 percent of students were from minority groups. These districts served 32 percent of the nation's students (figure 1.8).
- Although nearly half (49 percent) of all public school districts in 1993-94 had no minority teacher on their faculty, these districts served only 14 percent of the nation's public school students (figure 1.10).
- A larger proportion of school districts had between 10 and 50 percent minority enrollment in 1993-94 (29 percent) as compared with 1987-88 (22 percent), while the proportion with less than 10 percent minority students was smaller in 1993-94 (61 percent) compared with 1987-88 (65 percent) (table 1.2).

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Racial and Ethnic Composition of School Districts

- Minority students represented one-third (33 percent) of public school students in 1993-94, while minority teachers represented 13 percent of the public school faculty (tables 2.1 and 2.2).
- The proportion of public school students from minority groups was slightly larger in 1993-94 (33 percent) as compared with 1987-88 (30 percent), while the proportion of public school teachers who were minority group members was slightly smaller (13 percent in 1993-94; 14 percent in 1987-88) (tables 2.1 and 2.2).
- In 1993-94, blacks were the largest minority group among students and teachers in every region except the West where Hispanics and Asian/Pacific Islanders were more numerous (figures 2.2 and 2.11).

Newly Hired Teachers

- In 1993-94, nearly 8 percent of the nation's teachers were newly hired by their school district. These newly hired teachers are teachers who were not employed by their school district as teachers the previous year -- they can be teachers who have never taught previously, teachers returning to teaching after periods of at least a year, or teachers previously employed in other districts or in private schools (appendix A, table 11).
- In 1993-94, the districts with the highest proportions of newly hired teachers were more likely to be found in the South (10 percent) and West (9 percent) than in other regions (6 percent) (figure 3.1).
- About seven-eighths (87 percent) of the newly hired teachers in 1993-94 possessed regular or standard state certification to teach in their field of assignment. The proportions of newly hired teachers with regular state certification in their field of assignment were highest in districts in the Northeast (94 percent) and Midwest (96 percent). In districts in the South, 82 percent of the newly hired teachers possessed standard state certification in the field of assignment; in the West, 81 percent (figure 3.2).
- In 1993-94, the percentage of newly hired teachers who were certified in their fields of assignment was much higher in districts with fewer than 10 percent minority students (94 percent) than in districts that were at least 50 percent minority (75 percent) (figure 3.2).
- Newly hired teachers with emergency certification were found in over 20 percent of the nation's school districts in 1993-94. The proportions of newly hired teachers with emergency certification were much higher in the South (10 percent) and West (12 percent) than in the Northeast (2 percent) or Midwest (3 percent) (figure 3.4).
- Slightly more than 1 in 20 newly hired teachers in public school districts lacked either emergency or regular (standard) state certification for the field in which they were assigned to teach in 1993-94. The lack of certification was particularly prevalent in school districts in urban areas inside central cities in the South (14 percent) and the West (13 percent) (appendix A, table 12).

- In 1993-94, in districts whose minority student enrollment exceeded 50 percent, 11 percent of the newly hired teachers lacked both regular and emergency certification in their fields of assignment. An additional 14 percent of the newly hired teachers in these districts had only emergency certification, as compared with 8 percent, nationally (figure 3.5 and appendix A, table 12).
- Standard state certification was the most common teacher qualification criterion that administrators of public school districts required of applicants for teaching positions in 1993-94. Five-sixths (83 percent) of public school districts had this requirement. Although this does not ensure that all newly hired teachers will be certified, a higher proportion of newly hired teachers were actually certified in districts that had this requirement, compared with districts that did not require its use (appendix A, table 13).
- In 1993-94, 93 percent of the school districts in the Northeast required that standard state certification be considered when hiring new teachers. This percentage was greater than in any other region. In comparison, only 70 percent of the districts in the South required that standard state certification be a consideration in the hiring of new teachers (figure 3.6).
- In 1993-94, the requirement that standard state certification be considered when hiring new teachers was more common in districts with fewer than 10,000 students (84 percent) than in districts serving 10,000 or more students (75 percent). This requirement was also more typical of school districts with a predominantly (at least 90 percent) white student population (87 percent, in contrast to 76 to 77 percent of districts with other student racial compositions) (figure 3.6).

Teacher Demand and District Efforts to Recruit and Retain Teachers

- School districts were more successful in filling teaching position vacancies with permanent teachers in 1993-94 than in 1987-88. In 1987-88, the number of teaching positions that could not be filled by permanent teachers was 22,978 (or 1 percent of the full time equivalent [FTE] teachers in the country). By 1993-94, the number of positions that could not be filled by permanent teachers was 8,691 (or 0.3 percent of the country's FTE teachers) (appendix A, table 17).
- Between 1987-88 and 1993-94, the proportion of school districts using pay incentives to recruit or retain teachers to teach in less desirable locations or in shortage fields increased from 8 percent to 15 percent; the proportion of school districts offering free training to prepare staff to teach in shortage areas increased from 12 percent to 19 percent. This finding suggests a growing problem in hiring teachers qualified to teach in specific shortage fields (appendix A, tables 20 and 24).
- Using pay incentives or free training as indicators of shortage, the subject area in which shortages were greatest in 1993-94 was special education. Other subject areas for which districts frequently used pay incentives or free training were (1) ESL or bilingual education and (2) mathematics (appendix A, tables 23 and 25).

- Special education teacher shortages appeared to be most severe in the largest districts, in districts in urban areas inside central cities, and in districts whose teaching staff was at least 20 percent minority (table 4.2).
- ESL or bilingual education teacher shortages were also more likely to be found in the largest districts, in districts in urban areas inside central cities, in districts whose student population was at least 50 percent minority, and in districts whose teaching staff was at least 20 percent minority. This problem was characteristic of school districts in the West and in the South (table 4.2).
- Math teacher shortages were more likely to be found in school districts in the South. However, math teacher shortages were as likely to be found in the largest districts (those with over 10,000 students) as in districts of other sizes (table 4.2).

Teacher Compensation

- The average scheduled salary for all public school teachers with Bachelor's degrees and no experience was \$21,923 in 1993-94. Adjusted for inflation, the average scheduled salary for comparably trained and educated teachers in 1990-91 was \$21,742. For public school teachers with a Master's degree and no experience, average scheduled salaries were \$23,956 in 1993-94 and \$23,691 in 1990-91 (adjusted for inflation). For public school teachers with a Master's degree and 20 years of teaching experience, average scheduled salaries were \$37,213 in 1993-94 and \$36,249 in 1990-91 (adjusted for inflation) (table 5.1).
- In 1993-94, scheduled salaries for public school teachers at all of the education and experience levels investigated (Bachelor's degree, no experience; Master's degree, no experience; Master's degree, 20 years teaching experience) were highest in the Northeast (\$25,581; \$27,727; \$46,594), followed by the West (\$21,913; \$24,505; \$37,800), the Midwest (\$20,879; \$23,013; \$35,718), and the South (\$20,407; \$21,714; \$30,955) (table 5.1).
- The prevalence of collective bargaining agreements was substantially higher in school districts in the Northeast (98 percent) than it was in school districts in the South (12 percent) in 1993-94. Scheduled salaries at all of the education and experience levels investigated were higher in school districts that had collective bargaining agreements. This was true irrespective of district size, proportions of minority students or teachers, or metropolitan status (appendix A, tables 28 and 29).
- Retirement benefits were offered by nearly all school districts. In 1987-88, 1990-91, and 1993-94, 99 percent of the nation's school districts offered retirement benefits (appendix A, table 30).

School District Programs and Policies

- Nationally, the number of years of instruction in English, mathematics, physical/biological science, and social science that were required for high school graduation were greater in 1993-94 than in 1990-91 (figure 6.1).
- The proportion of districts with computer science high school graduation requirements was higher in 1993-94 (37 percent) than in 1990-91 (33 percent). However, the proportion of school districts in the South in urban areas inside central cities with computer science graduation requirements was lower in 1993-94 (21 percent) than in 1990-91 (40 percent) (appendix A, table 38).
- In contrast with computer science, the proportion of districts requiring completion of a foreign language course was about the same in 1993-94 (18 percent) and 1990-91 (19 percent) (figure 6.2).
- In 1993-94, graduation requirements in core subject areas (English, math, social science, and physical/biological science) in districts in the Midwest were usually lower than those in other regions (table 6.2).
- School districts in urban areas inside central cities, particularly in states in the West, were most likely to have a foreign language high school graduation requirement in 1993-94. About 45 percent of these districts had a foreign language graduation requirement, in contrast to the national average of 18 percent (figure 6.4 and appendix A, table 39).
- Students eligible for participation in the National School Lunch program were found in nearly all (93 percent) of the nation's school districts in 1993-94. Eligible students were more likely to be found in school districts in the South (98 percent), in districts with over 1,000 students (99 percent), in urban school districts (95-96 percent), in districts where the concentration of minority students was 10 percent or greater (96 percent), and in districts where there was at least one minority teacher (95-96 percent) (figure 6.5 and appendix A, table 43).
- In 1993-94, Chapter 1 programs (reauthorized through the Improving America's Schools Act [Public Law 103-382] as the Title 1 program) were available in nearly all (92 percent) of the nation's school districts. Chapter 1 programs were more likely to be offered in districts with over 1,000 students (98-99 percent) and in districts where there was at least one minority teacher (95-96 percent) (figure 6.6 and appendix A, table 41).
- In 1993-94, prekindergarten programs (day care, Head Start, Chapter 1, special education, and other general prekindergarten programs) were available in about two-thirds (64 percent) of the nation's public school districts. These programs were most likely to be provided in districts enrolling 10,000 or more students (91 percent), followed by districts serving between 1,000 to 9,999 students (76 percent), and were least likely to be offered in districts enrolling less than 1,000 students (51 percent) (table 6.4).
- Prekindergarten programs were more available in districts in urban areas inside central cities (84 percent) than in other districts in 1993-94 (table 6.4).

- In 1993-94, about five-sixths (84 percent) of the school districts in the country disseminated information about their students' performance on standardized tests to the general public. The largest school districts (i.e., those with enrollments of at least 10,000 students) were the most likely to do this (95 percent); districts with enrollments of under 1,000, the least likely (77 percent) (appendix A, table 44 and figure 6.7).
- About 8 percent of the school districts in the country offered magnet school choice programs in 1993-94. These programs were most likely to be offered by districts with more than 10,000 students (33 percent), districts in central cities (24 percent), and districts with the highest concentrations (50 percent minority or more) of minority students (13 percent) and the highest concentrations (20 percent minority or more) of minority teachers (14 percent) (figure 6.8 and table 6.5).
- Nearly all (98 to 99 percent) of the country's school districts had written policies about student discipline and alcohol, drug, and tobacco use in 1993-94 (appendix A, table 46).

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Introduction

Context for Examining Public School Districts

Public elementary and secondary schools in the United States are governed, for the most part, by elected school boards, with each board presiding over a local education agency (LEA), more commonly known as a school district.¹ As the basic legal and fiduciary units of the public education system, a large percentage of decisions that affect schools are made at the district level. The administrative role of the district involves such activities as anticipating changes in student enrollment, establishing guidelines for hiring faculty, negotiating staff compensation, defining district-wide policies, and adopting programs to meet various student needs.

The publicly available statistical information on the nation's public school districts to date has been limited to certain demographic characteristics of districts, their student enrollment and racial composition, and their numbers of teachers (e.g., U.S. Department of Education 1995; Levine, McLaughlin, and Sietsema 1996). This report expands the statistical information on public school districts with the description of a variety of attributes, policies, and practices of public school districts in the United States in 1993-94. Trends in some features of school districts from 1987-88 to 1993-94 are also identified. The report is a nontechnical resource of information about disparate aspects of public school districts based on the Teacher Demand and Shortage (TDS) Questionnaire of the Schools and Staffing Survey (SASS) for 1987-88, 1990-91, and 1993-94. It is directed to a broad audience of educators, educational researchers, and policymakers in state, local, and federal agencies.

Teacher Demand and Shortage (TDS) Questionnaire of the Schools and Staffing Survey (SASS)

The data sources for this report are the Teacher Demand and Shortage (TDS) questionnaires from the Schools and Staffing Surveys (SASS) for 1987-88, 1990-91, and 1993-94. SASS is a nationally representative survey of schools, teachers, principals, and public school districts conducted by the U.S. Department of Education's National Center for Education Statistics (NCES). The objective of SASS is to obtain information on the staffing, occupational, and organizational characteristics of elementary and secondary schools in the United States.

¹ The term "district" will be used in place of "Local Education Agency (LEA)" in this report.

In each year of the Schools and Staffing Survey, the TDS questionnaires were mailed out to district administrators for a nationally representative sample of over 5,000 school districts. (See appendix C for more detailed information on the sample design for school districts in each year of the survey.) The three administrations of the TDS questionnaire were similar, but not identical. The 1993-94 TDS questionnaire covered a broader range of topics than the two earlier questionnaires.

The topics about which administrators were questioned in the 1993-94 TDS include, among others, the number and racial composition of students and teachers; the number and qualifications of new hires; hiring criteria; teacher demand; teacher compensation and incentives; programs and services provided by the district; district graduation requirements; and other student policies. This report provides statistical information on these topics for school districts in 1993-94. Trends among school districts from 1987-88 to 1993-94 are reported where the available data permitted such analyses; they are discussed in the report when differences over time were observed.

Characteristics of School Districts

Within each topic area of this report, school districts are compared across three demographic and two geographic characteristics that were deemed to be of interest to educators and policymakers. These comparisons permit local educators and policymakers to use the information presented in figures or tables as a reference for comparing the situation in their school districts with similar types of districts nationally.

The geographic characteristics include the region and metropolitan status of a district. The demographic characteristics include the size of district enrollment, proportion of minority students enrolled in a district, and proportion of minority teachers on staff in a district. The classification of districts for each of these characteristics are as follows:

- *Region* of the country includes the Northeast, Midwest, South, and West. (See appendix C for a listing of states in each region.)
- *Metropolitan status* includes districts located in urban areas primarily inside central cities, districts located in urban areas primarily outside central cities, and districts located in nonurban areas.
- *District size* includes districts with under 1,000 students, districts with 1,000 to 9,999 students, and districts with 10,000 or more students enrolled in kindergarten through 12th grade.
- *Proportion of minority students* in a district includes categories for districts with under 10 percent minority students, 10 percent to under 50 percent minority students, and 50 percent or more minority students.
- *Proportion of minority teachers* in a district includes categories for no minority teachers, some but under 20 percent minority teachers, and 20 percent or more minority teachers on the district's teaching staff.

Additional technical information about these classification schemes can be found in appendix C.

Some school districts are administrative agencies and do not employ teachers. The findings presented in this report are not applicable to these kinds of districts. The findings are representative of public school districts that employ at least one teacher and are not exactly comparable with data presented in other reports that are based on all school districts.

With the exception of region, all of these district characteristics can change over time. In other words, a district's metropolitan status, size classification, proportion of minority students classification, and proportion of minority teachers classification can change, reflecting changes occurring in the district. The longitudinal data that are presented in this report classify districts according to their characteristics at either the time the sample was selected (metropolitan status) or when the classification data were collected (district size, proportion of minority students, proportion of minority teachers). For example, longitudinal data describe how districts with specific characteristics (e.g., more than 10,000 students in 1993-94) compare with districts that had the same characteristic (more than 10,000 students) in other years (e.g., 1987-88 or 1990-91).

Organization of this Report

This is a descriptive report on various facets of public school districts. Each of the six chapters deals in some detail with a different aspect of school districts.

- Chapter 1 provides an overview of the geographic and demographic characteristics of school districts and describes selected trends in those characteristics.
- Chapter 2 examines the racial and ethnic composition of the students and teachers in public school districts and identifies trends in the proportions of students and teachers from minority groups in public school districts.
- Chapter 3 reports the percentage of teachers who have been newly hired by school districts in the past year, describes the qualification levels of these newly hired teachers, and examines the hiring criteria used by school districts.
- Chapter 4 assesses the ability of districts to fill vacancies and describes district efforts to recruit and retain teachers through pay incentives and training programs.
- Chapter 5 examines teacher salary levels and their relation to collective bargaining, and describes trends in salary schedules from 1990-91 to 1993-94.
- Chapter 6 describes a variety of school district policies and programs, including graduation requirements, district participation in national programs (e.g., the National School Lunch program, the Chapter 1 program (reauthorized through the Improving America's Schools Act [Public Law 103-382] as the Title 1 program), and prekindergarten programs), and recent state and local reforms that affect district policies and programs (i.e., reporting practices on student test

performance, school choice programs, and policies on student discipline, alcohol use, and drug use).

- Chapter 7 suggests ways in which these data might be used for further investigations of the nation's educational system.

This report does not require or assume any statistical expertise on the part of its readers. Differences and similarities discussed in the text, however, have been evaluated for statistical significance using Student's t statistic adjusted for multiple comparisons with the Bonferroni procedure at the $\alpha = .05$ level.²

Graphs are used extensively in each chapter to provide a clear presentation of the findings. A summary of the major findings from each of the chapters is contained in the Highlights section at the front of this report.

For those wanting additional information, appendix A contains a series of tables from which the information contained in the figures were obtained. Appendix A also contains tables that present data on many of the topics covered in the report, by state. Appendix B contains the standard errors for the tables in appendix A. Appendix C contains technical notes that provide more detailed information on the survey design, overall accuracy of estimates, statistical procedures used in this report, and references to other NCES publications.

² A description of the statistical procedures is included in appendix C.

Chapter 1

Geographic and Demographic Characteristics

Overview

An overview of some basic characteristics of public school districts provides a context for the more detailed descriptions, in subsequent chapters, of district student and staffing characteristics, policies, practices, and programs. Accordingly, descriptions of geographic and demographic characteristics of school districts for the 1993-94 school year and changes in these characteristics between the 1987-88 and 1993-94 school years are provided in this chapter.

Region

The Schools and Staffing Survey (SASS) estimates that there were 14,987 school districts at the start of the 1993-94 school year. The largest percent of districts were located in the Midwest and the fewest in the West (table 1.1).³

Table 1.1—Percentage of public school districts and students, by region: 1993-94

Region	Districts	Students
Total	100.0	100.0
Northeast	20.6	18.2
Midwest	37.7	22.8
South	22.1	36.3
West	19.6	22.7

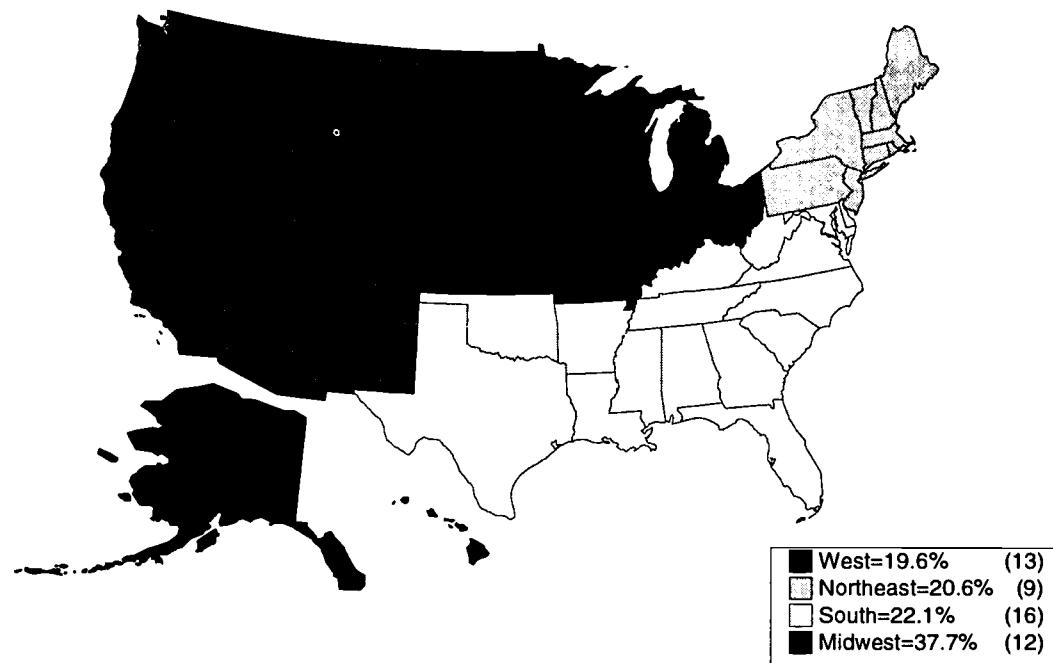
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

More than one-third (38 percent) of all school districts were located in the Midwest (table 1.1 and figure 1.1). About one-fifth of the nation's school districts were in each of the other three

³ Four geographic regions, corresponding to areas defined by the U.S. Bureau of the Census, were employed in this report. The states comprising each region are listed in the Technical Appendix, page C-13.

regions. However, the greatest proportion (36 percent) of the nation's public school students were in the South and the smallest proportion (18 percent) were in schools in the North (table 1.1).

Figure 1.1—Percentage of public school districts, by region: 1993-94

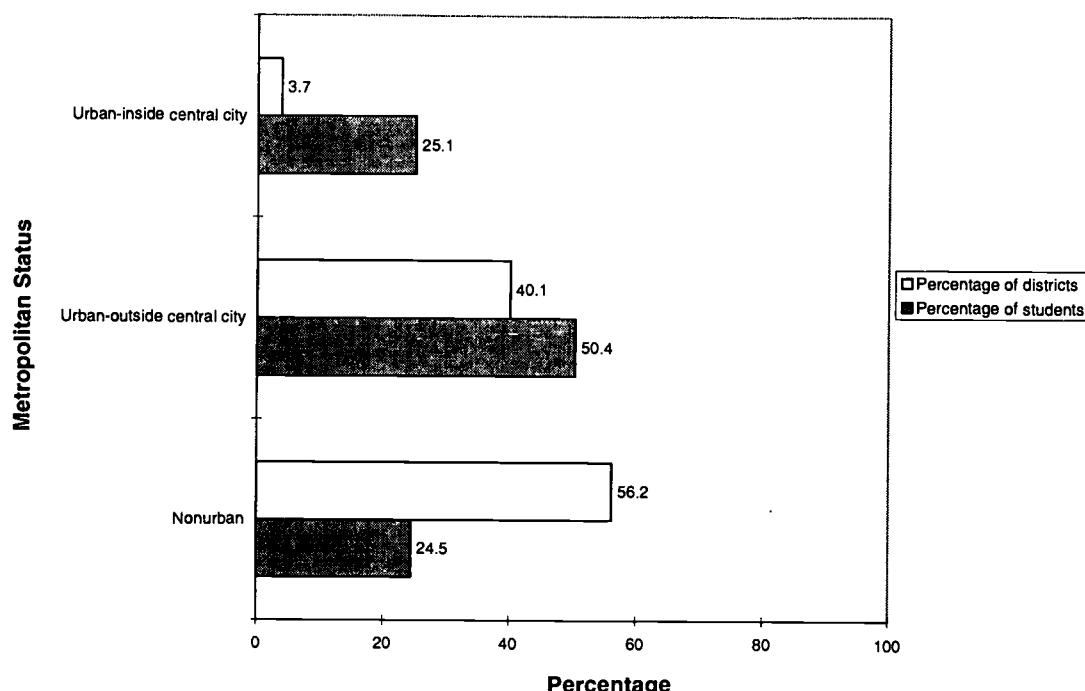


SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Metropolitan Status

In 1993-94, over half (56 percent) of all public school districts were located in nonurban areas (figure 1.2 and appendix A, table 1). Another 40 percent of districts were located in urban areas outside central cities. Only 4 percent of all public school districts were located in urban areas inside central cities. Nevertheless, these urban central city districts were responsible for the education of 25 percent of the nation's public school students (appendix A, table 10).

Figure 1.2—Percentage of districts and students, by metropolitan status: 1993-94

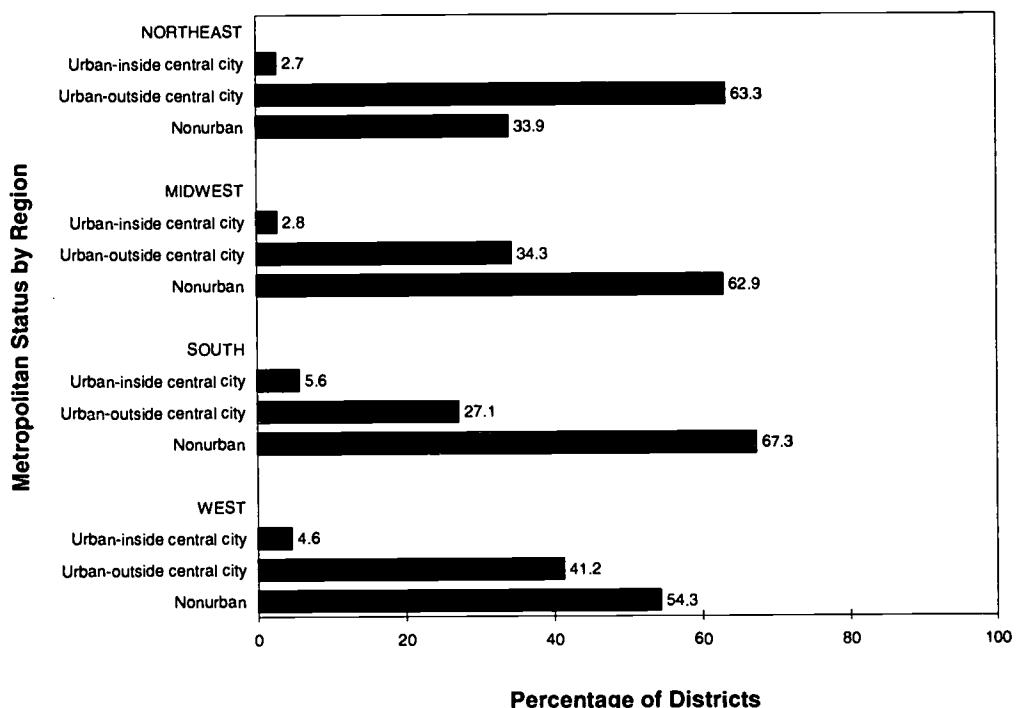


SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Approximately two-thirds of school districts in the Midwest (63 percent) and South (67 percent) were located in nonurban areas, compared with half (54 percent) of the districts in the West and only one-third (34 percent) of the districts in the Northeast (figure 1.3 and appendix A, table 2).⁴ Nearly two-thirds (63 percent) of the school districts in the Northeast were located in urban areas outside central cities. In each region, the smallest percentage of districts, ranging from 3 to 6 percent, were inside central cities.

⁴ Percent of districts in each metro status category within regions were calculated from data in table 2 in appendix A, by dividing within each region the number of districts in a metro status category by the total number of districts in that region.

Figure 1.3—Percentage of public schools districts by metropolitan status, by region: 1993-94

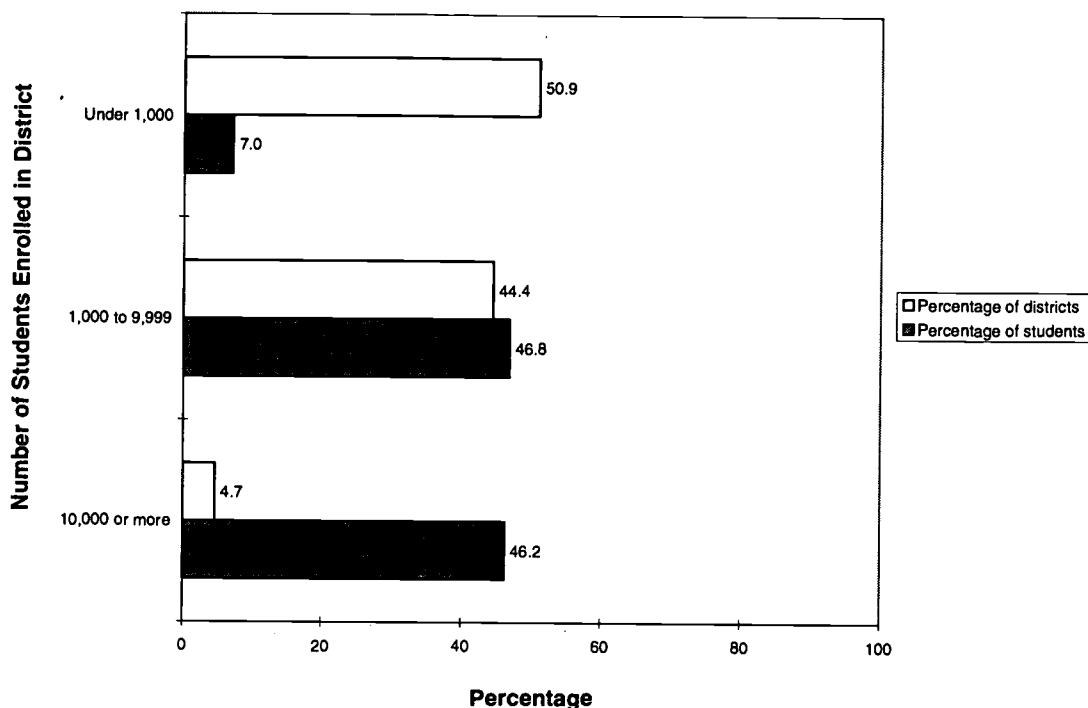


Note: Details may not sum to 100.0 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire)

District Size

In 1993-94, districts with enrollments of fewer than 1,000 students comprised one-half (51 percent) of all public school districts (figure 1.4 and appendix A, tables 1 and 10). However, these districts enrolled only 7 percent of students enrolled in all public school districts. Districts with 1,000 to 9,999 students comprised 44 percent of the school districts and served 47 percent of all public school students. The largest school districts (10,000 or more students) amounted to only 5 percent of all school districts. These districts, however, served nearly half (46 percent) of the students enrolled in public school districts.

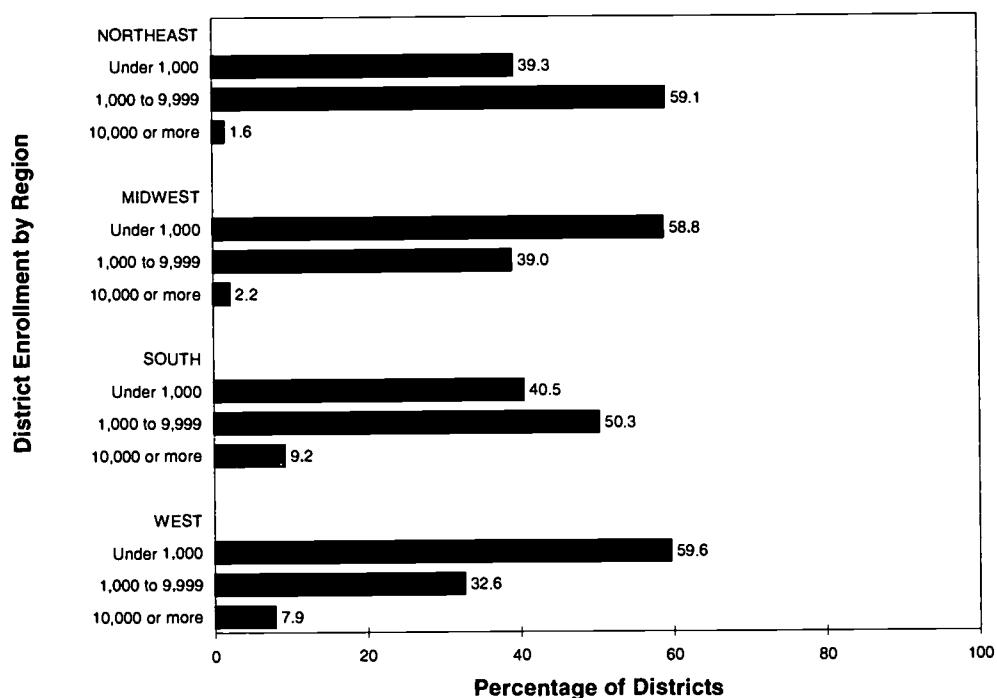
Figure 1.4—Percentage of districts and students, by district size: 1993-94

Note: Details may not sum to 100.0 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

A majority of the school districts in the Midwest (59 percent) and West (60 percent) had fewer than 1,000 students (figure 1.5 and appendix A, table 4). In the Northeast and South, at least half of the school districts had enrollments of 1,000 to 9,999 students (59 and 50 percent, respectively). The largest school districts (10,000 or more students) made up a larger proportion of districts in the South (9 percent) and West (8 percent) than in the Northeast or Midwest (2 percent each).

Figure 1.5—Percentage of public school districts by district size, by region: 1993-94

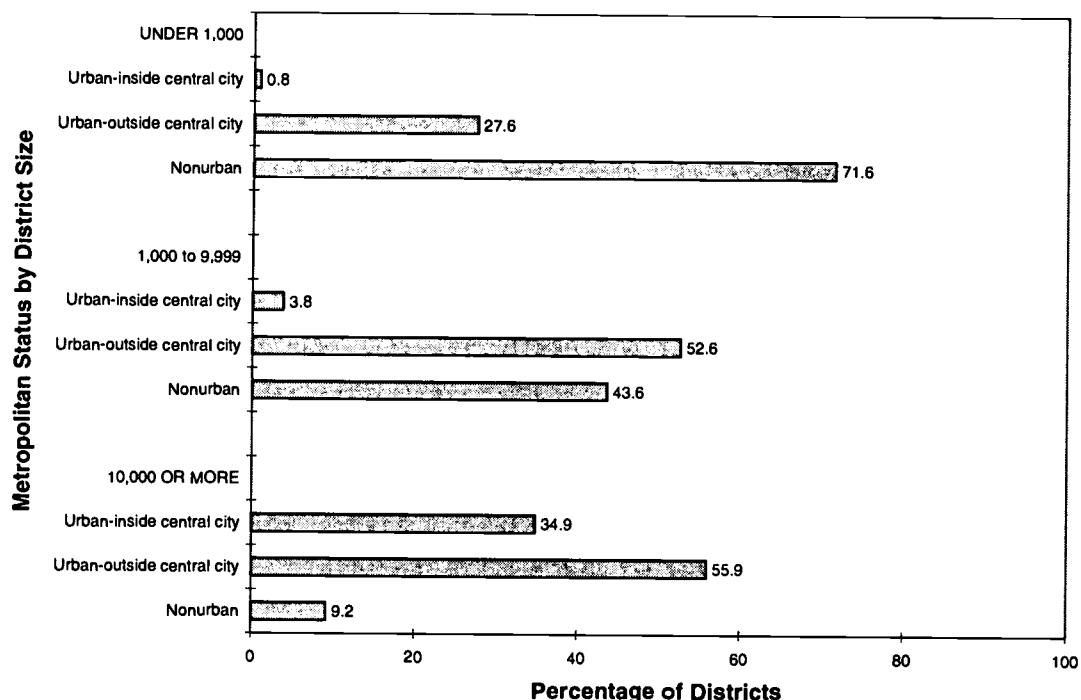


Note: Details may not sum to 100.0 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Districts enrolling fewer than 1,000 students were most numerous in nonurban areas (figure 1.6 and appendix A, table 5), where they constituted about two-thirds (65 percent) of the districts (figure 1.7 and appendix A, table 5). The districts with 1,000 to 9,999 students were most numerous in urban areas outside central cities, where they made up 53 percent of all school districts. The largest districts, with enrollments of 10,000 or more students, were also most numerous in urban areas outside central cities (figure 1.6). However, the largest districts represented 44 percent of all school districts in urban areas inside central cities, compared with about 7 percent of districts in other urban areas and only about 1 percent of nonurban districts (figure 1.7).

Figure 1.6—Percentage of public school districts by metropolitan status, by district size: 1993-94

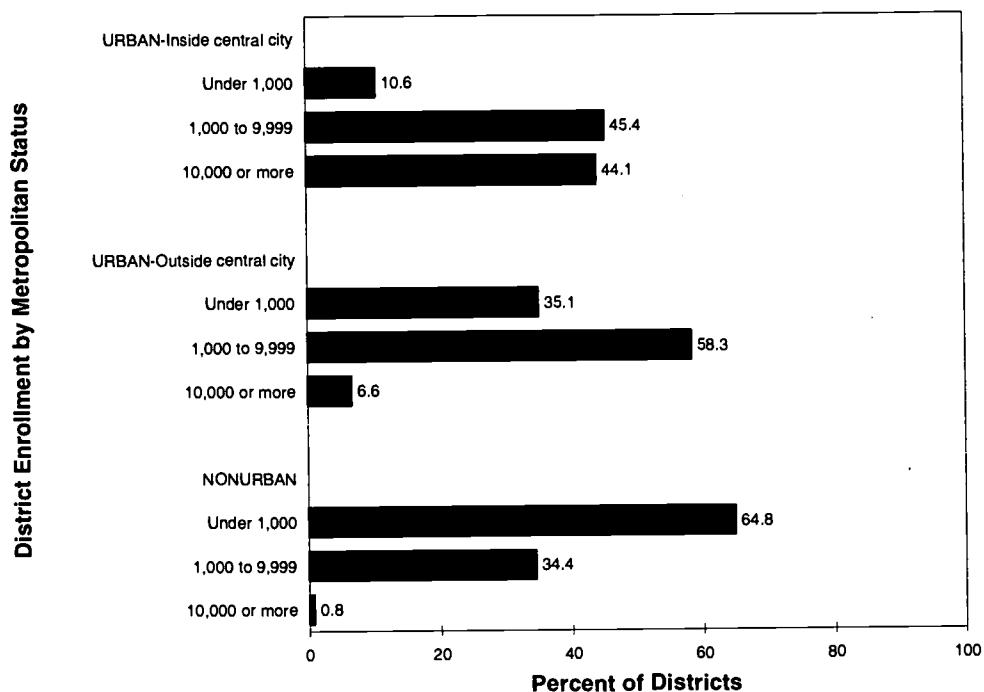


Note: Details may not sum to 100.0 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

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Figure 1.7—Percentage of public school districts by district size, by metropolitan status: 1993-94



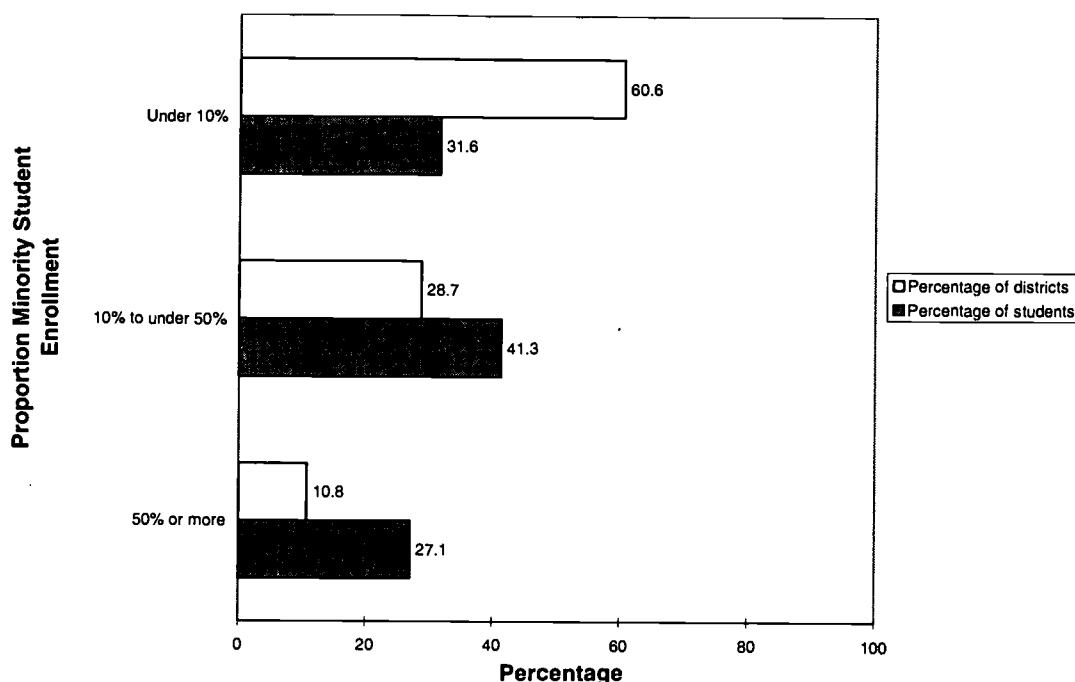
Note: Details may not sum to 100.0 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Minority Students

In 1993-94, three-fifths (61 percent) of the nation's public school districts had predominantly white student populations (i.e., fewer than 10 percent of students were from a minority group) (figure 1.8 and appendix A, tables 1 and 10). However, about two-thirds (68 percent) of all students were enrolled in school districts that had minority compositions of at least 10 percent. On the other hand, only about one-tenth (11 percent) of districts were ones in which minority groups represented at least one-half of the district's student enrollment. Yet these school districts accounted for one-quarter (27 percent) of all students enrolled in public schools.

Figure 1.8—Percentage of districts and students, by proportion of minority student enrollment: 1993-94

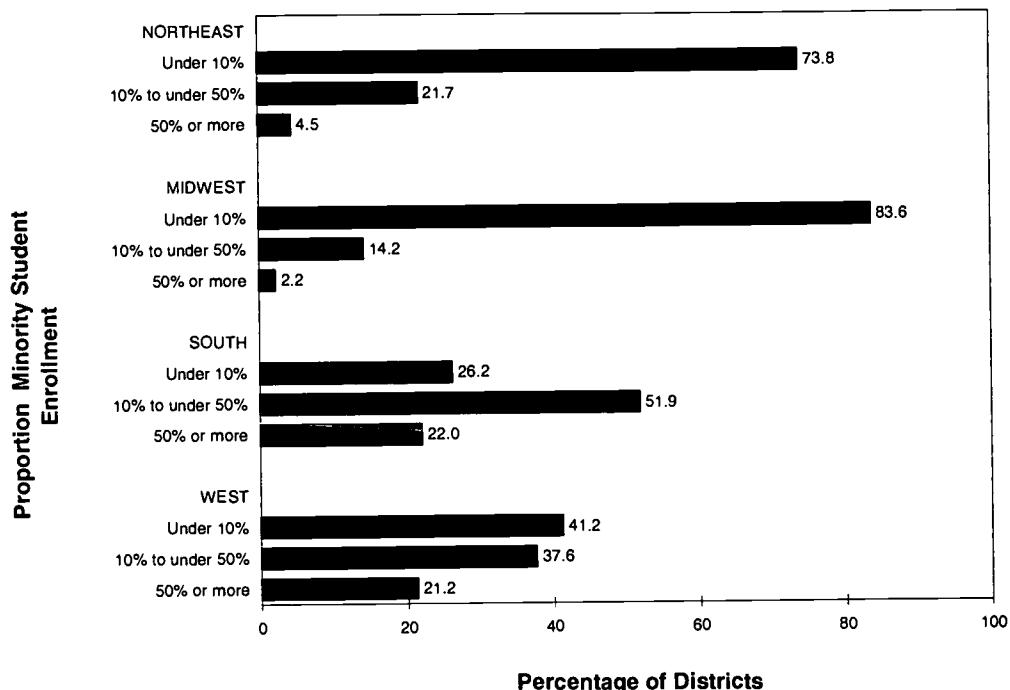


Note: Details may not sum to 100.0 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Fewer than 1 in 10 students were from minority groups in 84 percent of school districts in the Midwest, and 74 percent of the districts in the Northeast, as compared with 41 percent of districts in the West, and 26 percent in the South (figure 1.9 and appendix A, table 3). Districts with between 10 and 50 percent minority enrollment characterized about half (52 percent) of the districts in the South and two-fifths (38 percent) of the districts in the West. Minority students made up at least half of the student population in one-fifth of the districts in the South (22 percent) and West (21 percent). By comparison, minority students made up at least half of the student population in only 5 percent of districts in the Northeast and 2 percent of districts in the Midwest.

Figure 1.9—Percentage of public school districts by proportion of minority student enrollment, by region: 1993-94*



Note: Details may not sum to 100.0 percent due to rounding.

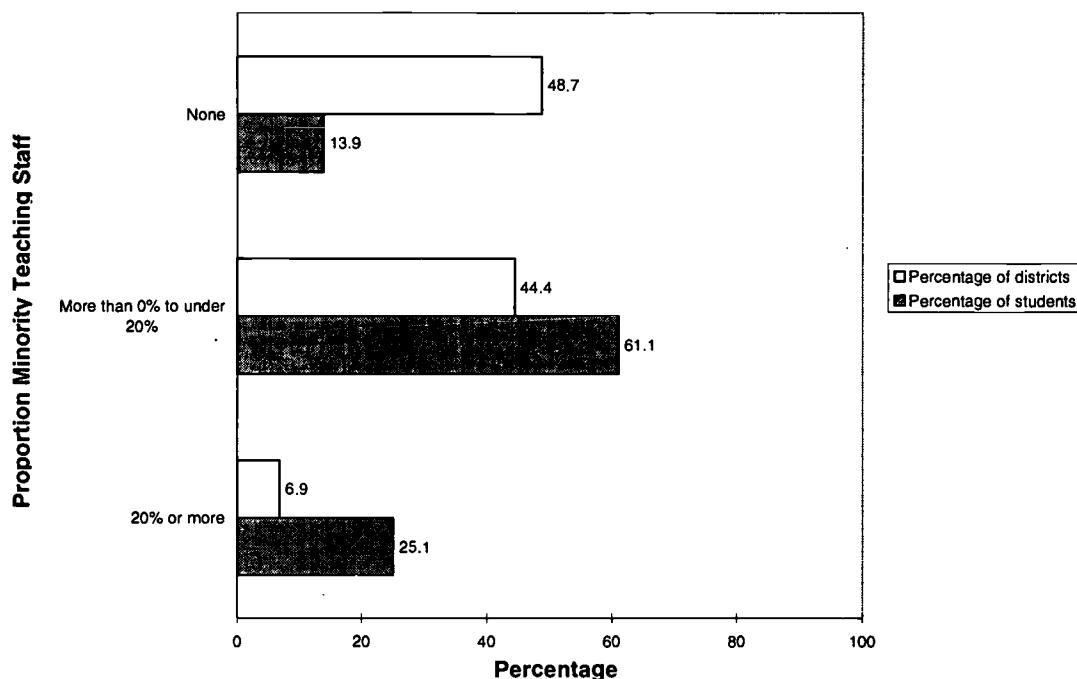
(*) Excludes 45 districts with no students in 1993-94.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Minority Teachers

Nearly half (49 percent) of all public school districts had no minority teachers on their faculty. However, the districts with no minority teachers served only 14 percent of all students (figure 1.10 and appendix A, tables 1 and 10). Only 7 percent of all districts had teaching staffs in which one-fifth or more of the teachers were from minority groups. However, these districts served one-quarter (25 percent) of all public school students.

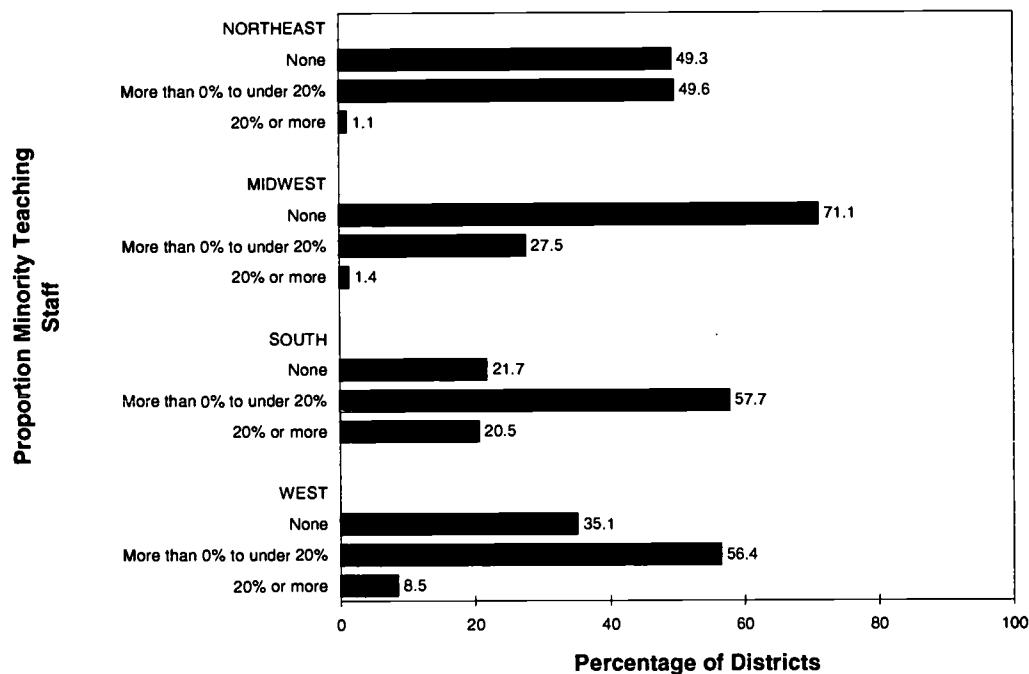
Figure 1.10—Percentage of districts and students, by proportion of minority teachers: 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

The proportion of districts with no minority teachers was greatest in the Midwest, where 71 percent of school districts had no minority teachers, and was lowest in the South, where 22 percent of districts had no minority teachers (figure 1.11 and appendix A, table 6). One-fifth or more of the teaching staff were from minority groups in 21 percent of the districts in the South, compared with 9 percent of the districts in the West and only 1 percent of the districts in the Northeast and Midwest.

Figure 1.11—Percentage of public school districts by proportion of minority teachers, by region: 1993-94



Note: Details may not sum to 100.0 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Changes in District Characteristics, 1987-88 to 1993-94

The proportions of districts with small and moderate proportions of minority students changed from 1987-88 to 1993-94 (table 1.2). Districts with low proportions of minority students (i.e., under 10 percent minority enrollment) dropped by 4 percentage points from 1987-88 to 1993-94, whereas districts with moderate proportions of minority students (i.e., 10 percent to under 50 percent) increased by 6 percentage points over the same time period (table 1.2). A general increase in minorities as a proportion of the student population may have contributed to such changes.⁵ The proportion of districts with 50 percent or more minority students was relatively constant in 1987-88 (13 percent) and in 1993-94 (11 percent).

⁵ Levine, R., McLaughlin, D., and Sietsema, J. (1996); U.S. Department of Education (1994).

Table 1.2—Percentage of public school districts, by percentage of minority student enrollment: 1987-88 and 1993-94

<u>School Year</u>	<u>Percent Minority Student Enrollment</u>			<u>TOTAL</u>
	<u>Under 10%</u>	<u>10% to under 50%</u>	<u>50% or more</u>	
1987-88	65.0	22.4	12.6	100.0
1993-94	60.6	28.7	10.8	100.0
Change from 1987-88	- 4.4	+ 6.3	- 1.8	

(*) Excludes 82 districts with no students in 1987-88 and 45 districts with no students in 1993-94.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1993-94 (Teacher Demand and Shortage Questionnaire).

A comparison of the composition of teaching staffs across survey years indicates that the proportion of school districts with no minority teachers in 1993-94 (49 percent) was comparable with the proportion of such districts in 1987-88 (52 percent). However, a larger proportion of districts had at least one, but less than 20 percent minority teachers in 1993-94 (44 percent) as compared with 1987-88 (40 percent), while a smaller proportion of districts had 20 percent or more minority teachers in 1993-94 (7 percent) as compared with the 1987-88 school year (9 percent)⁶ (table 1.3).

Table 1.3—Percentage of public school districts, by percentage of minority teachers: 1987-88 and 1993-94

<u>School Year</u>	<u>Percentage Minority Teachers</u>			<u>TOTAL</u>
	<u>None</u>	<u>More than 0% and under 20%</u>	<u>20% or more</u>	
1987-88	51.5	39.5	9.0	100.0
1993-94	48.7	44.4	6.9	100.0
Change from 1987-88	- 2.8	+ 4.9	- 2.1	

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1993-94 (Teacher Demand and Shortage Questionnaire).

⁶ Changes in the percentage distribution of public school districts by metropolitan status from 1987-88 to 1993-94 could not be analyzed because data were not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

Chapter 2

Racial and Ethnic Composition of School Districts

Overview

Desegregation of public school districts has been a public policy issue for the last 40 years, during which the population of the U.S. has become increasingly diverse. Consequently, the racial and ethnic composition of the student population and their teachers is a topic of general interest. The first part of this chapter describes the 1993-94 racial-ethnic composition of the student population and examines trends in minority student enrollment in public school districts from 1987-88 to 1993-94. The second part of the chapter describes the current racial-ethnic composition of the faculty in public school districts and examines trends in representation of minority teachers in public school districts.

Minority Students

The proportion of minority students in the country increased gradually, but steadily, from 1987-88 to 1993-94 (table 2.1). In 1987-88, minority students represented 30 percent of the student population, compared with 33 percent in 1993-94.

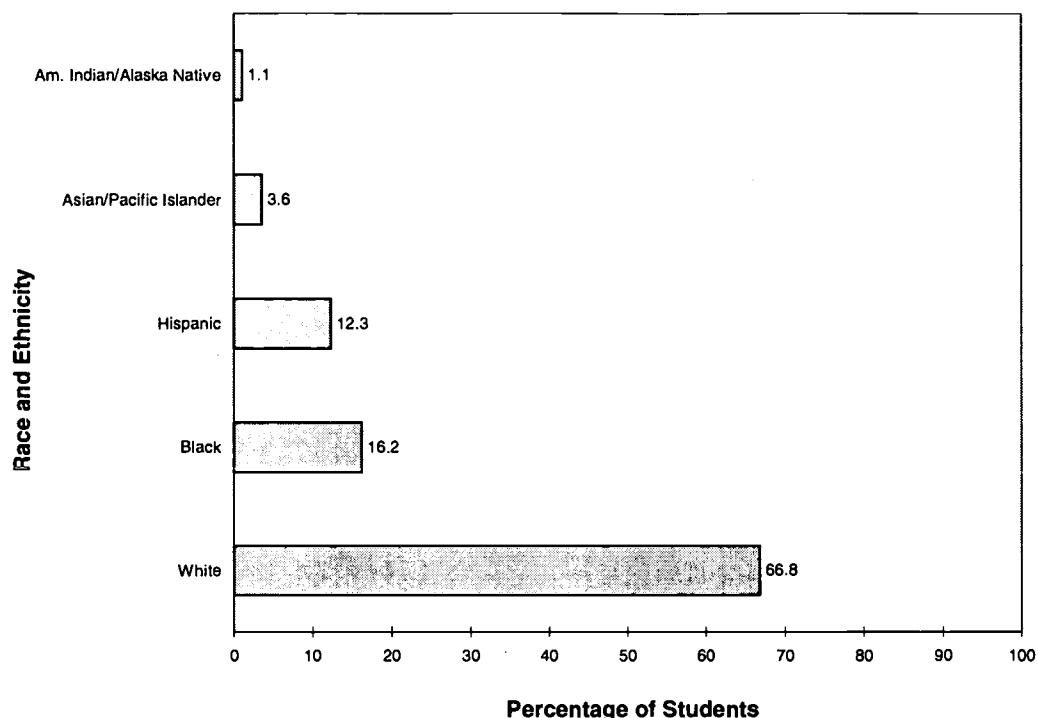
Table 2.1—Percentage of minority students, by school year: 1987-88 to 1993-94

Year	Percent
1987-88	30.4
1990-91	31.7
1993-94	33.2

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Black students were the largest minority student group, making up 16 percent of the public school population in 1993-94, followed by Hispanics, (12 percent), and Asian/Pacific Islanders (4 percent) (figure 2.1 and appendix A, table 10). American Indian and Alaska Natives were the smallest minority group comprising about 1 percent of public school students.

Figure 2.1—Percentage distribution of students, by race and ethnicity: 1993-94



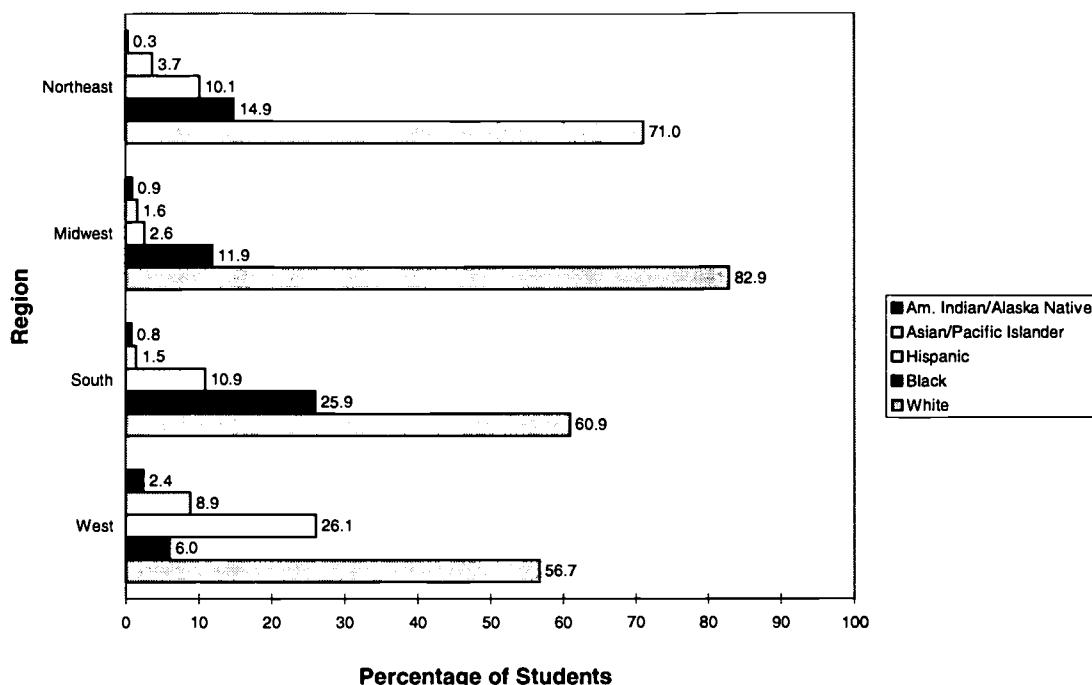
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Regional Differences and Trends

The racial and ethnic diversity of public school students varies greatly by region. The student population was most homogenous in the Midwest, where 83 percent of students enrolled in public school districts in 1993-94 were white, non-Hispanic and only 17 percent of students were members of minority groups (figure 2.2 and appendix A, table 10). In contrast, 43 percent of students in the West and 39 percent of students in the South were from a minority group.

Blacks were the largest minority group in three of the four major regions of the country in 1993-94; however, in the West, Hispanics and Asian and Pacific Islanders were more numerous (figure 2.2). Black students constituted one-quarter (26 percent) of the student population in the South, but only about one-sixteenth (6 percent) in the West. Hispanics were the largest minority group in the West, where they comprised 26 percent of students. In the Midwest, Hispanics made up less than 3 percent of public school students. Asian and Pacific Islanders were the second largest minority group in the West, where they comprised 9 percent of students. In contrast, they constituted only about 1.5 percent of students in the Midwest and the South. American Indian and Alaska Native students were the smallest minority group in every region, making up about 2.5 percent of students in the West and 1 percent or less of students in other regions.

Figure 2.2—Percentage distribution of students by race and ethnicity, by region: 1993-94

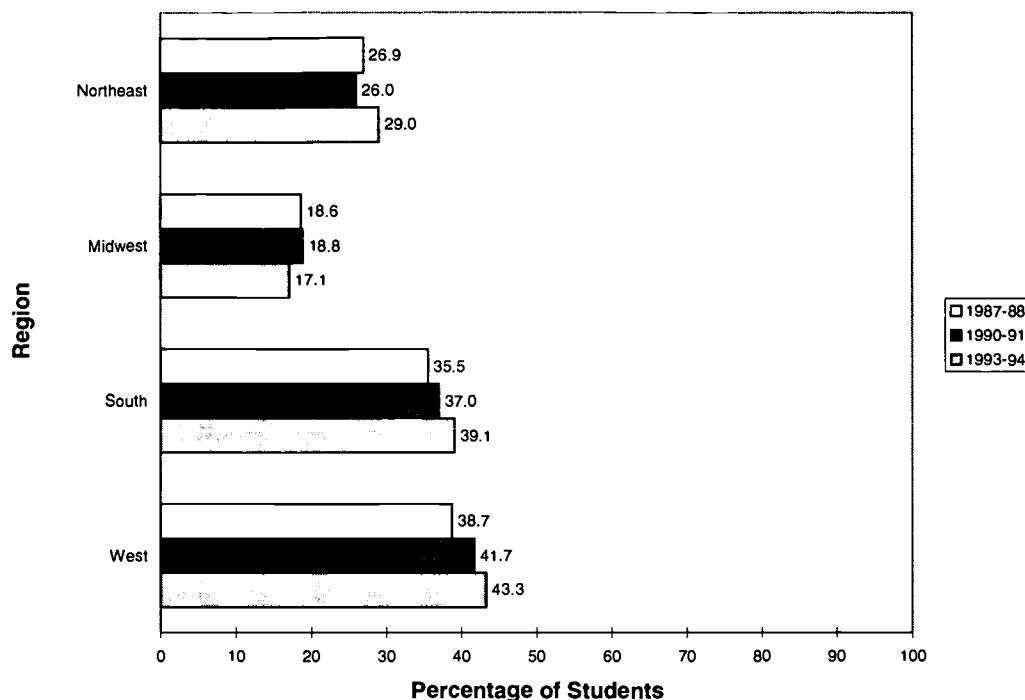


Note: Details may not sum to 100.0 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Trends in the proportion of students from minority groups varied by region (figure 2.3 and appendix A, table 8). The Midwest and Northeast not only had smaller proportions of minority students than the West and South, but they also showed little change in the proportion of minority students between 1987-88 and 1993-94. In the West, which had the largest representation of minorities, the proportion of minority students was nearly 5 percentage points greater in 1993-94 than in 1987-88. In the South, the proportion of minority students was nearly 4 percentage points greater in 1993-94 than 6 years earlier.

Figure 2.3—Percentage of minority students, by region: 1987-88, 1990-91, and 1993-94



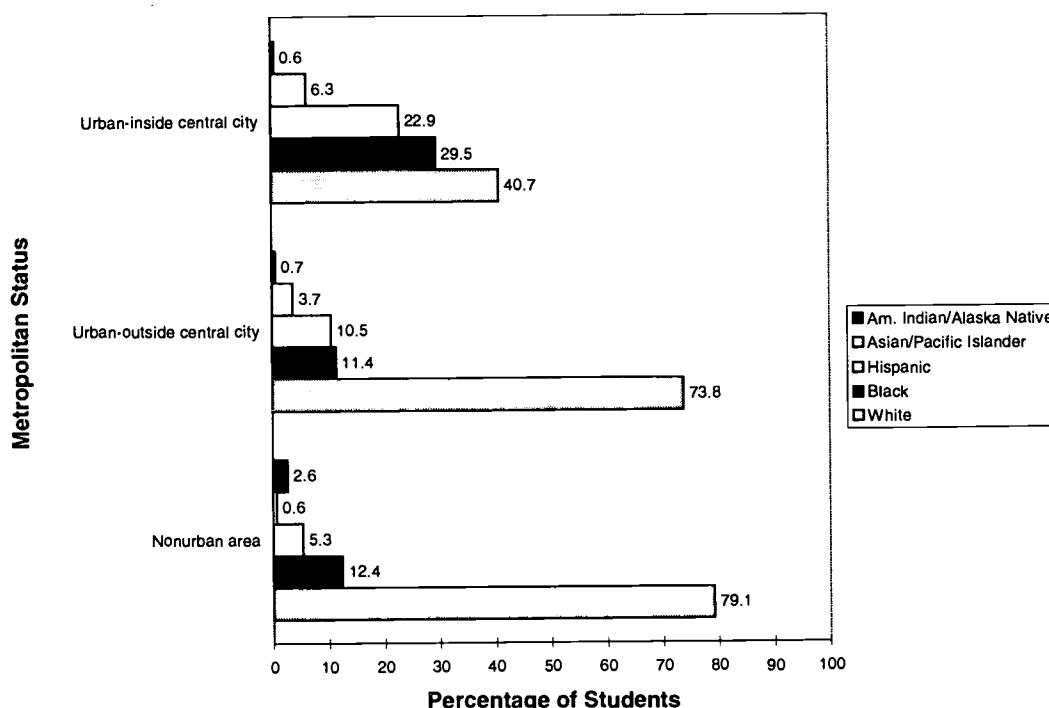
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Metropolitan Status Differences and Trends

The student populations of public school districts in nonurban areas and in urban areas outside of a central city were relatively homogenous in 1993-94 compared with central city school districts. White, non-Hispanics accounted for roughly three-quarters of the students in nonurban school districts (79 percent) and in districts in urban areas outside central cities (74 percent) (figure 2.4 and appendix A, table 10). In school districts in urban areas inside central cities, however, white, non-Hispanics represented only 41 percent of the students.

Black students were the largest minority group in central city and nonurban school districts. In urban districts outside of a central city, the proportions of Blacks and Hispanics were comparable. Each accounted for about one-tenth (i.e., 10 percent each) of the students in such districts. American Indian and Alaska Native students were the smallest minority group in urban school districts, but were more numerous than Asian and Pacific Islanders in nonurban districts.

Figure 2.4—Percentage distribution of students by race and ethnicity, by metropolitan status: 1993-94



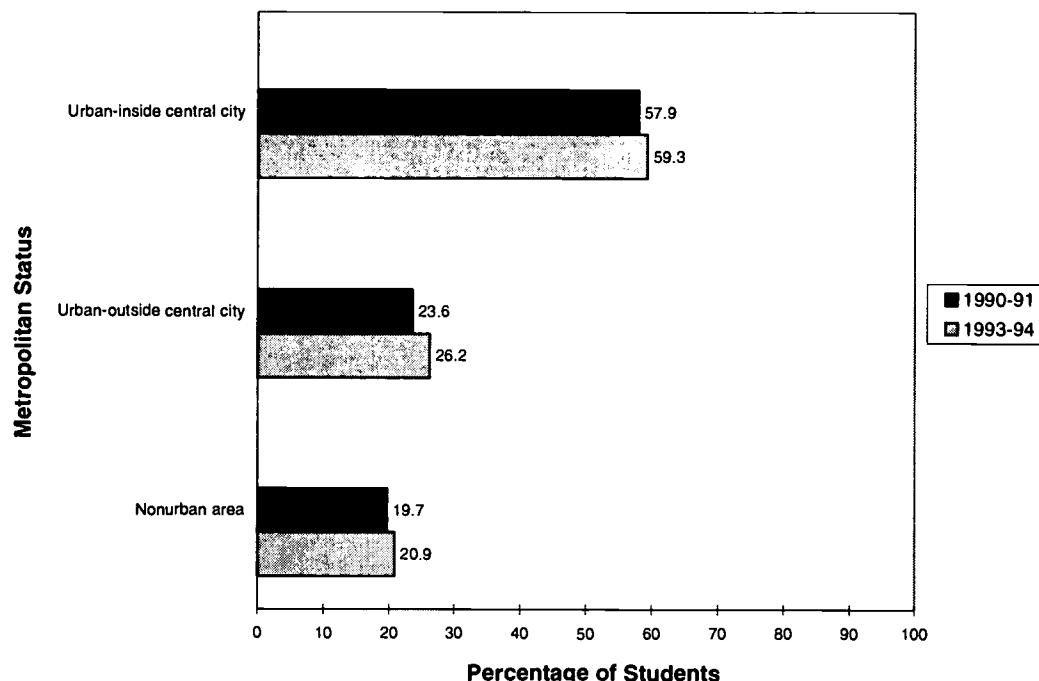
Note: Details may not sum to 100.0 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

All minority groups, except for American Indians and Alaska Natives, were most heavily represented in central city school districts. Blacks accounted for 30 percent of students in central city school districts, compared with one-tenth of the students in other urban and nonurban school districts. Hispanics represented nearly one-quarter (23 percent) of students in school districts in urban areas inside central cities, compared with about one-tenth of students in other urban districts (11 percent) and one-twentieth (5 percent) of students in nonurban areas. Likewise, the representation of Asian and Pacific Islanders at 6 percent of the student population in school districts in urban areas inside central cities was greater than in other urban districts (4 percent) and nonurban areas (1 percent). American Indian and Alaska Natives, on the other hand, were more heavily represented in nonurban districts, where they made up 2.6 percent of the nonurban student population as compared with less than 1 percent of the students in urban school districts.

Shifts in the proportion of minority students within urban and nonurban districts are difficult to detect between 1990-91 and 1993-94 (figure 2.5 and appendix A, table 8). The proportion of minority students was constant during this period for both districts in urban areas inside central cities and districts in nonurban areas. Among districts in urban areas outside central cities, minority students accounted for 26 percent of students in 1993-94, compared with 24 percent in 1987-88.

Figure 2.5—Percentage of minority students, by metropolitan status: 1990-91 and 1993-94

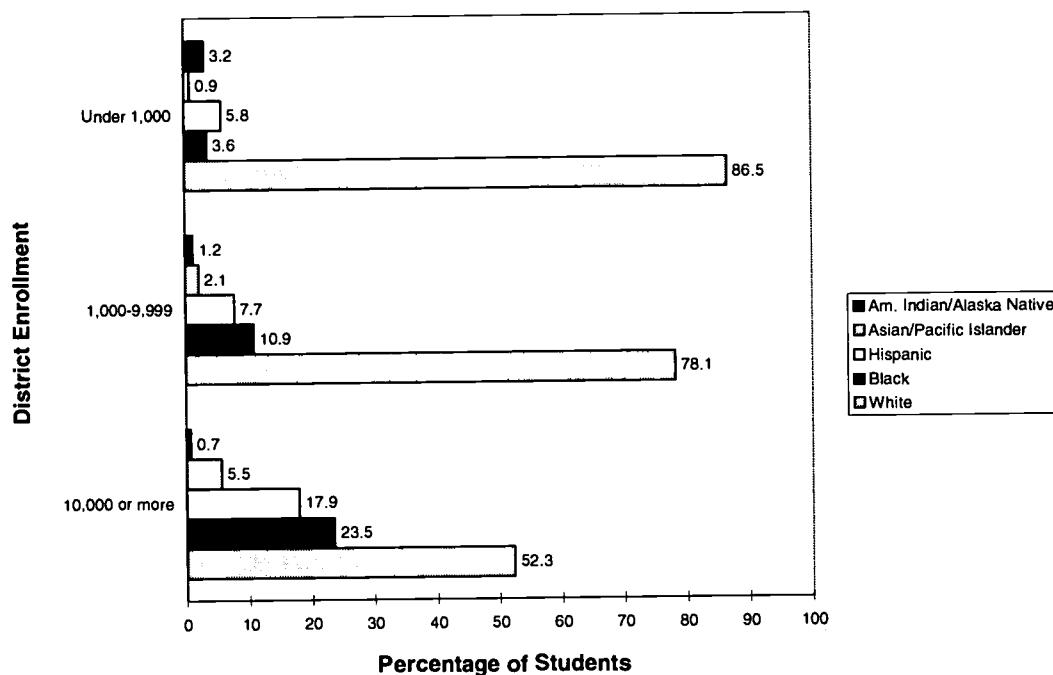


SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire).

District Size Differences and Trends

The student populations in small school districts with fewer than 1,000 students and medium-sized districts of 1,000 to 9,999 students were less racially and ethnically diverse than large school districts of 10,000 or more students. White, non-Hispanics accounted for 87 percent of students in small school districts and 78 percent of students in medium-sized school districts, as compared with 52 percent of students in large school districts (figure 2.6 and appendix A, table 10). Black students were the most numerous of minority students in large school districts, where they accounted for 24 percent of all students and in medium-sized districts, where they accounted for 11 percent of students. Hispanics were the second largest minority group in these districts.

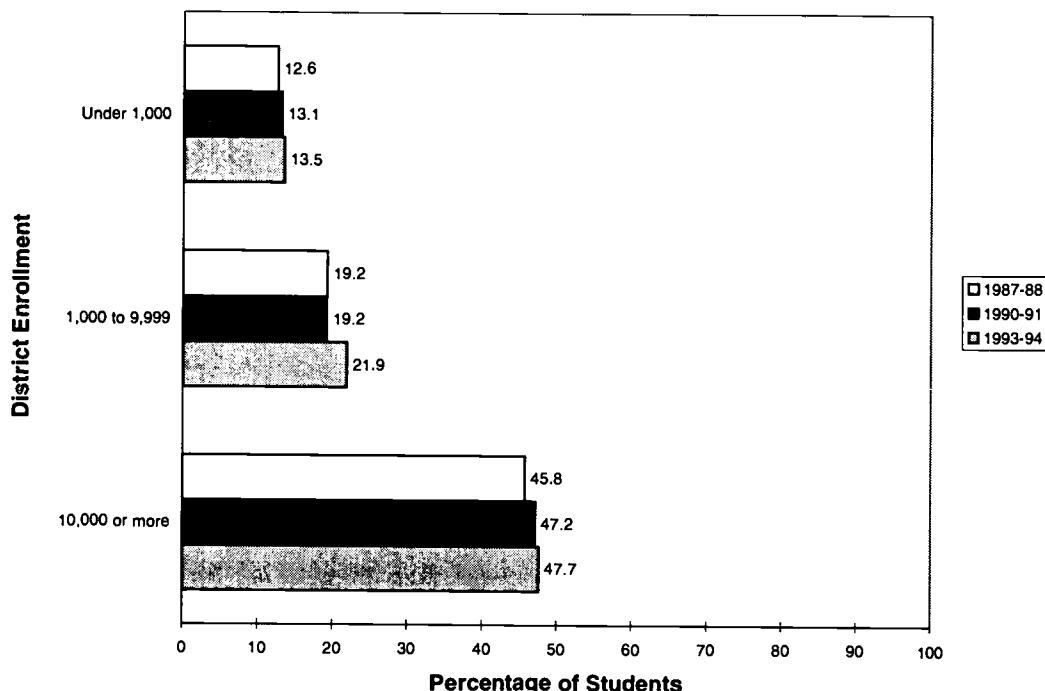
Figure 2.6—Percentage distribution of students by race and ethnicity, by district size: 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Large- and medium-sized school districts experienced a modest trend toward a greater proportion of minority students in the 6-year period from 1987-88 to 1993-94 (figure 2.7 and appendix A, table 8). The proportion of minority students in large districts was 48 percent in 1993-94, compared with 46 percent in 1987-88. In medium-sized school districts, minority students accounted for 22 percent of students in 1993-94, compared with 19 percent in 1987-88. In small school districts, on the other hand, the proportion of students from minority groups remained relatively constant at about 13 percent.

Figure 2.7—Percentage of minority students, by district size: 1987-88, 1990-91, and 1993-94

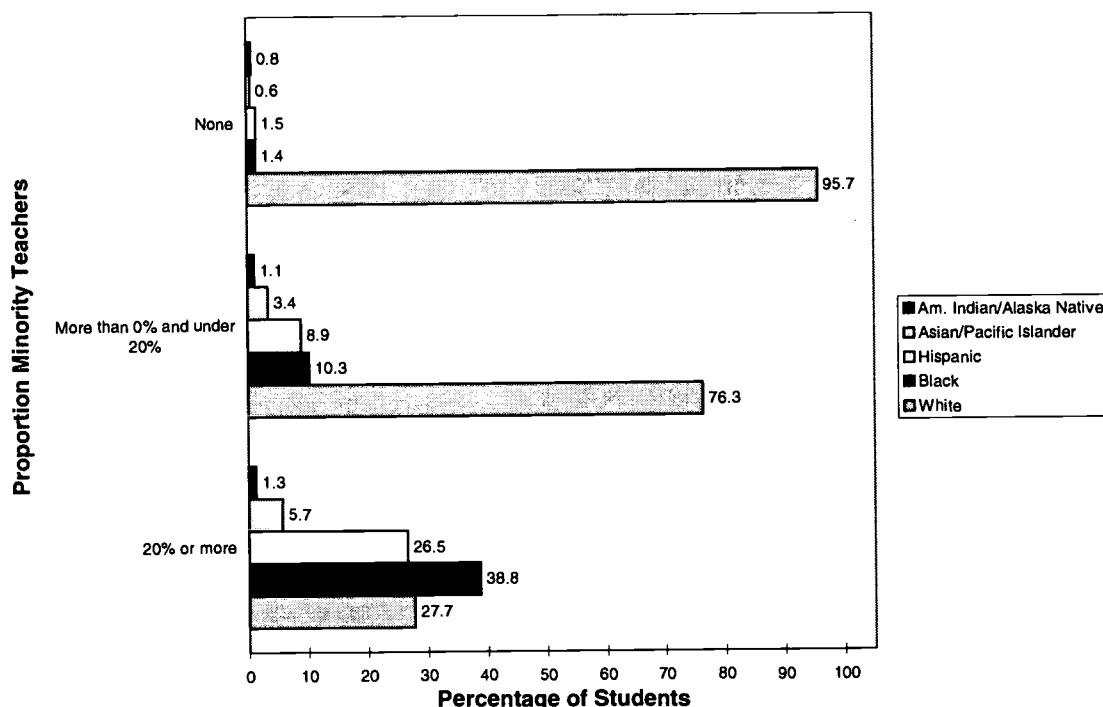


SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Differences in Trends in Minority Enrollments by Proportion of Minority Teachers

The student population of school districts with no minority teachers was not diverse in 1993-94, with white, non-Hispanics accounting for 96 percent of students (figure 2.8 and appendix A, table 10). Although these districts represented almost half of all public school districts, they served only 14 percent of all public school students (see chapter 1). The proportion of white, non-Hispanic students was lower in districts with high proportions of minority teachers. White, non-Hispanics represented about one-quarter (28 percent) of students in districts where the teaching staff consisted of 20 percent or more minority teachers, compared with three-quarters (76 percent) of students in districts in which some, but less than 20 percent of the faculty, were minorities.

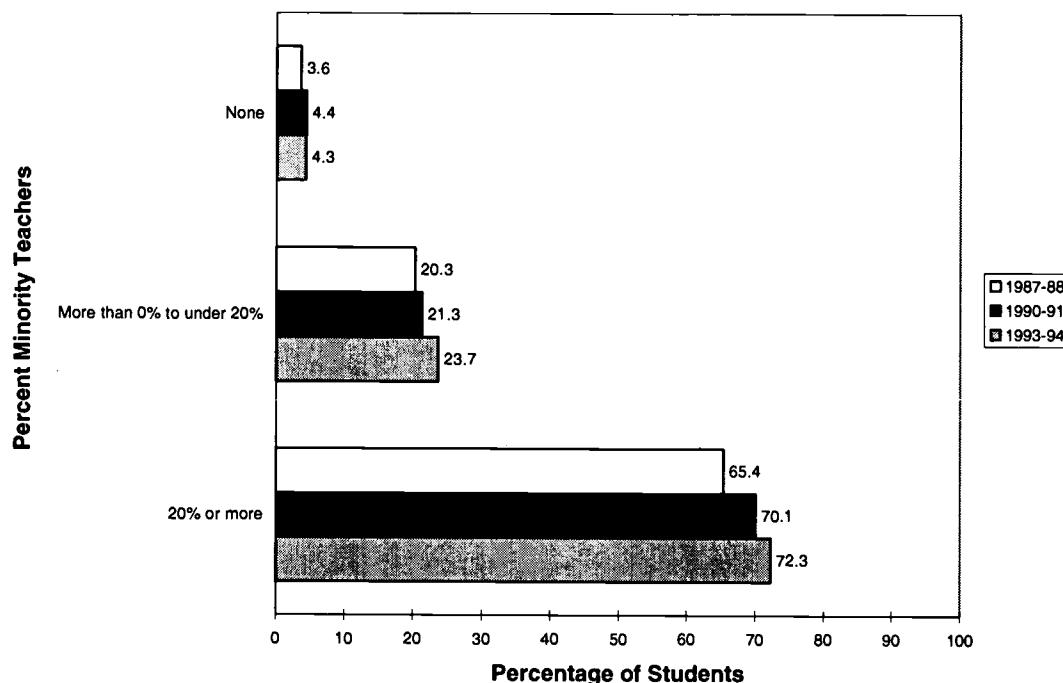
Figure 2.8—Percentage distribution of students by race and ethnicity, by proportion of minority teachers on district staff: 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

In districts employing 20 percent or more minority teachers, black students were the largest racial and ethnic group, accounting for 39 percent of the student population. Hispanics and white, non-Hispanics each represented about one-quarter of the student population (27 percent for Hispanics and 28 percent for white non-Hispanics) in these districts. These districts represented 7 percent of public school districts and served one-quarter of all public school students (see chapter 1). In other districts employing minority teachers, black and Hispanic students each represented about 10 percent of the student population, although the number of blacks was still slightly larger than the number of Hispanics.

Districts that employed minority teachers showed a trend between 1987-88 and 1993-94 toward greater proportions of minority students (figure 2.9 and appendix A, table 8). In districts where 20 percent or more of the faculty were minority, the proportion of students from minority groups was 72 percent in 1993-94, compared with 65 percent in 1987-88. And, in districts that employed minority teachers as a lower proportion of the faculty, minority students represented 24 percent of all students in 1993-94, compared with 20 percent of students in 1987-88. In districts that employed no minority teachers, minority students represented a relatively constant 4 percent of the student population from 1987-88 to 1993-94.

Figure 2.9—Percentage of minority students, by proportion of minority teachers on district staff: 1987-88, 1990-91, and 1993-94

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Minority Teachers

In contrast to the gradual growth in the proportion of students from minority groups, the proportion of teachers from minority groups was slightly smaller in 1993-94 compared with 1987-88 and 1990-91. Table 2.2 shows that minority teachers represented 13.0 percent of the teaching staff in 1993-94, compared with 13.6 percent in 1987-88 and 1990-91.

Table 2.2—Percentage of minority teachers, by school year: 1987-88 to 1993-94

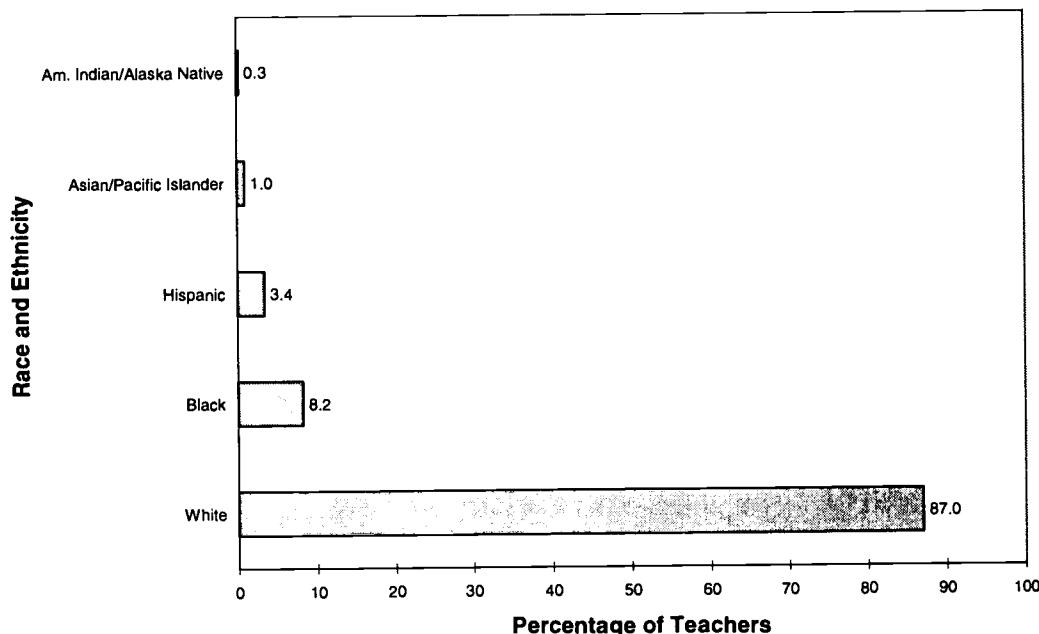
Year	Percent
1987-88	13.6
1990-91	13.6
1993-94	13.0

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Black teachers were the largest group of minority teachers in public schools in 1993-94, representing 8 percent of the teaching staff (figure 2.10 and appendix A, table 9). Hispanics were the second largest group at 3 percent. Asian and Pacific Islanders accounted for only 1

percent of public school teachers; American Indian and Alaska Natives, less than 1 percent of public school teachers.

Figure 2.10—Percentage distribution of teachers, by race and ethnicity: 1993-94



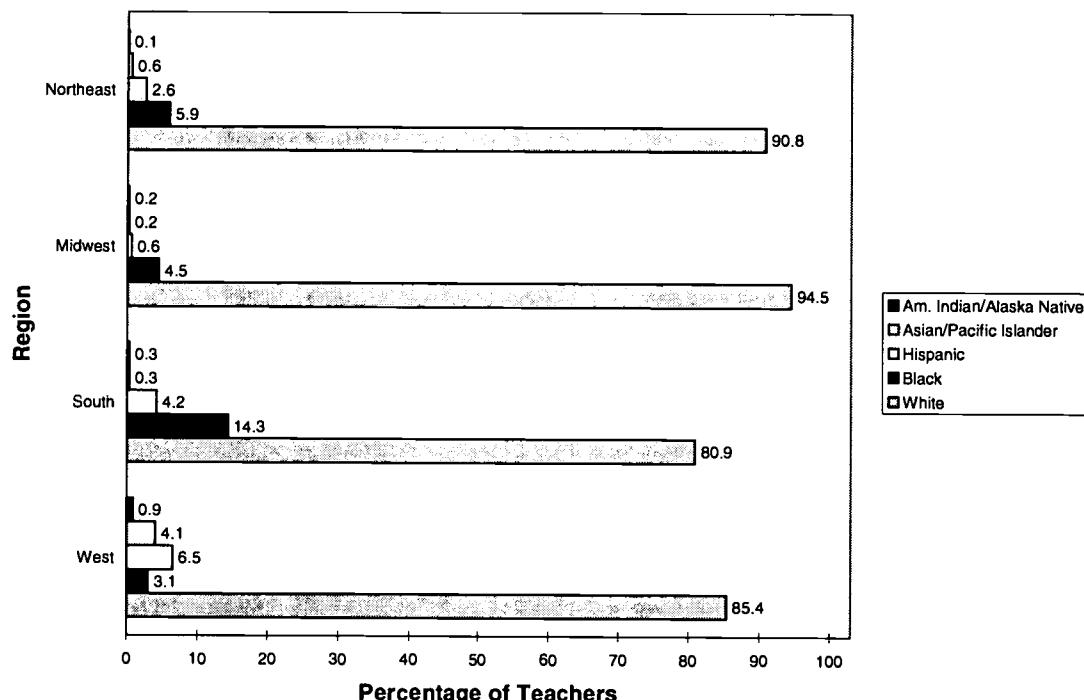
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Regional Differences and Trends

As with the student population, teaching staffs were least diverse in the Midwest, where 95 percent of public school teachers in 1993-94 were white, non-Hispanic (figure 2.11 and appendix A, table 9). However, at least four-fifths of teachers in every region were white, non-Hispanics. The South had the lowest proportion at 81 percent.

Paralleling the situation among students, blacks were the largest minority group of teachers in every region in 1993-94, except for the West where Hispanics and Asian and Pacific Islanders were more numerous. Blacks made up 14 percent of the teachers in the South, but only 3 percent in the West.

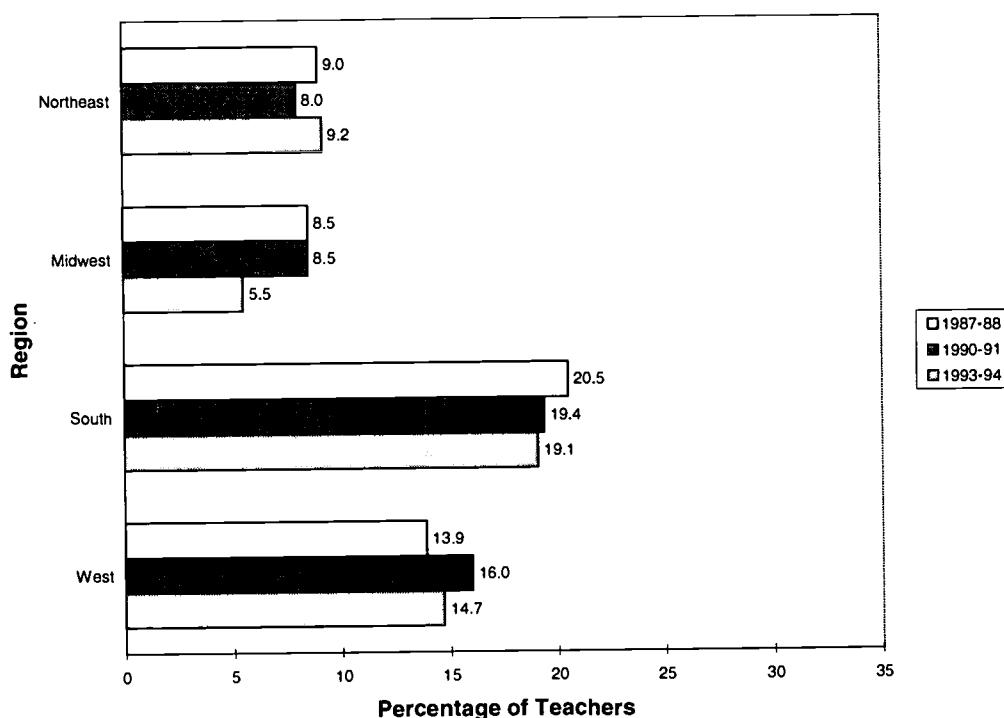
Figure 2.11—Percentage distribution of teachers by race and ethnicity, by region: 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Hispanics were the largest minority group in the West, where they represented about 7 percent of teachers. However, they made up less than 1 percent of teachers in the Midwest. Asian and Pacific Islanders were the second largest minority group in the West, where they comprised 4 percent of teachers. American Indian and Alaska Native teachers comprised less than 1 percent of teachers in every region.

Slightly smaller proportions of teachers from minority groups were observed in 1993-94 compared with 1987-88 in the Midwest and in the South (figure 2.12 and appendix A, table 7). In the Midwest, the proportion of minority teachers was 9 percent in 1987-88, compared with 6 percent in 1993-94. In the South, the proportion of minority teachers was 21 percent in 1987-88 as compared with 19 percent in 1993-94. The percentages of teachers from minority groups in the Northeast and West in 1987-88 as compared with 1993-94 were about the same.

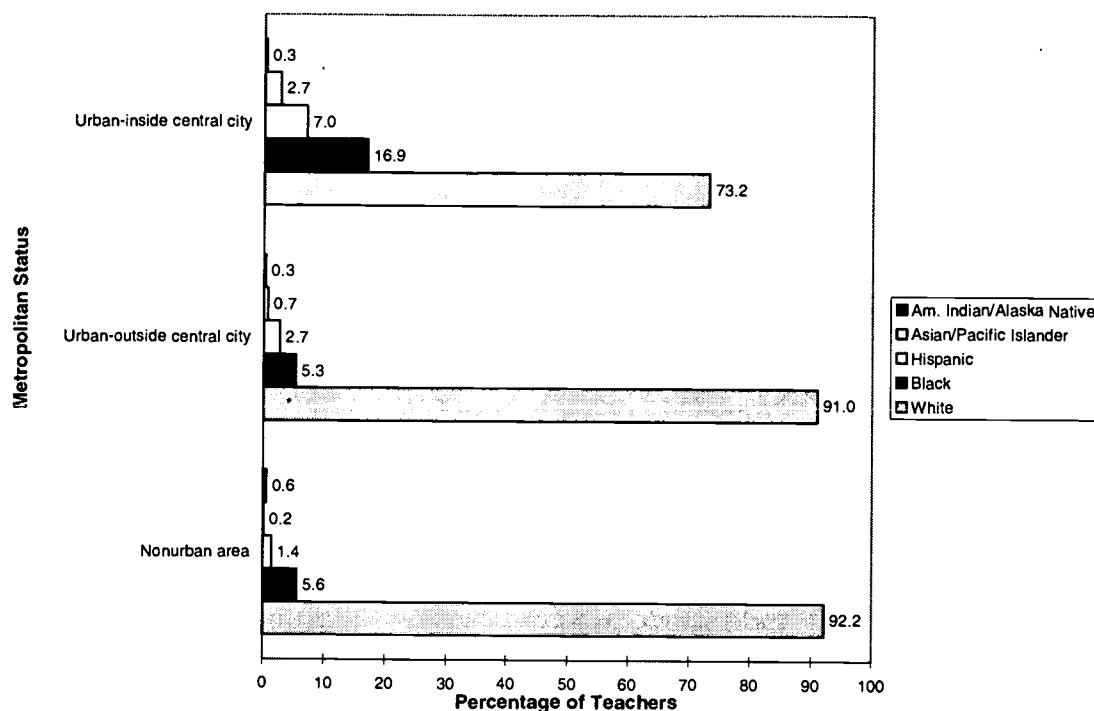
Figure 2.12—Percentage of minority teachers, by region: 1987-88, 1990-91, and 1993-94

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Metropolitan Status Differences and Trends

Teachers in nonurban districts and in districts in urban areas outside central cities were not very diverse in 1993-94, compared with teachers in school districts within central cities. Over 90 percent of the faculty of nonurban school districts and of school districts in urban areas outside central cities were white, non-Hispanic (figure 2.13 and appendix A, table 9). In central city school districts, white, non-Hispanics represented 73 percent of teachers. Black teachers were the largest minority group within each metropolitan status category of school districts. Hispanic teachers represented the second largest minority group within each metropolitan status category. American Indian and Alaska Native teachers were the smallest minority group in urban school districts, whereas Asian and Pacific Islanders constituted the fewest teachers of any minority group in nonurban districts.

Figure 2.13—Percentage distribution of teachers by race and ethnicity, by metropolitan status: 1993-94

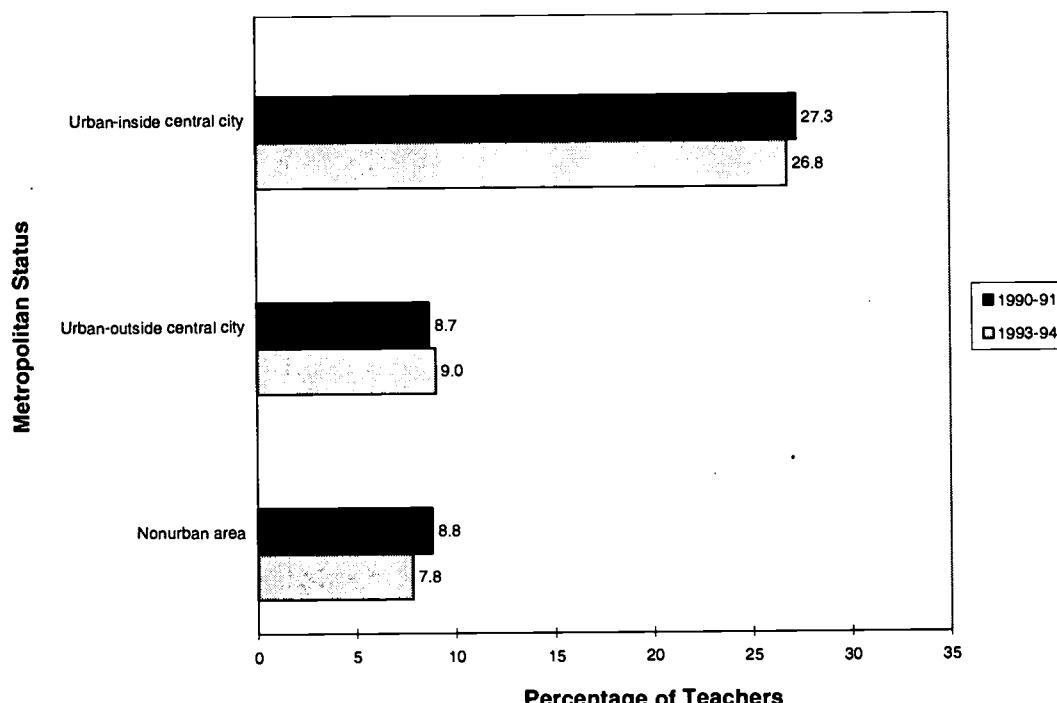


SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

All groups of minority teachers, except for American Indians and Alaska Natives, were more heavily represented on the faculty of central city school districts than in districts with other metropolitan statuses. As a proportion of the faculty, Blacks accounted for 17 percent of the teachers in districts in urban areas inside central cities. This was about three times as great as the 5 to 6 percent that they represented on the faculty of other urban and nonurban districts. Similarly, Hispanics represented 7 percent of central city teachers, compared with 3 percent or less in other districts. Asians accounted for less than 3 percent of teachers in central city school districts, and less than 1 percent in other districts. American Indian and Alaska Native teachers constituted less than 1 percent of the faculty, regardless of the metropolitan status of the district.

The proportion of minority teachers in urban districts remained constant between 1990-91 and 1993-94 at 27 percent for districts in urban areas inside central cities and 9 percent for districts in urban areas outside central cities (figure 2.14 and appendix A, table 7). In districts in nonurban areas, the proportion of minority teachers was 8 percent in 1993-94 compared with 9 percent in 1990-91.

Figure 2.14—Percentage of minority teachers, by metropolitan status: 1990-91 and 1993-94

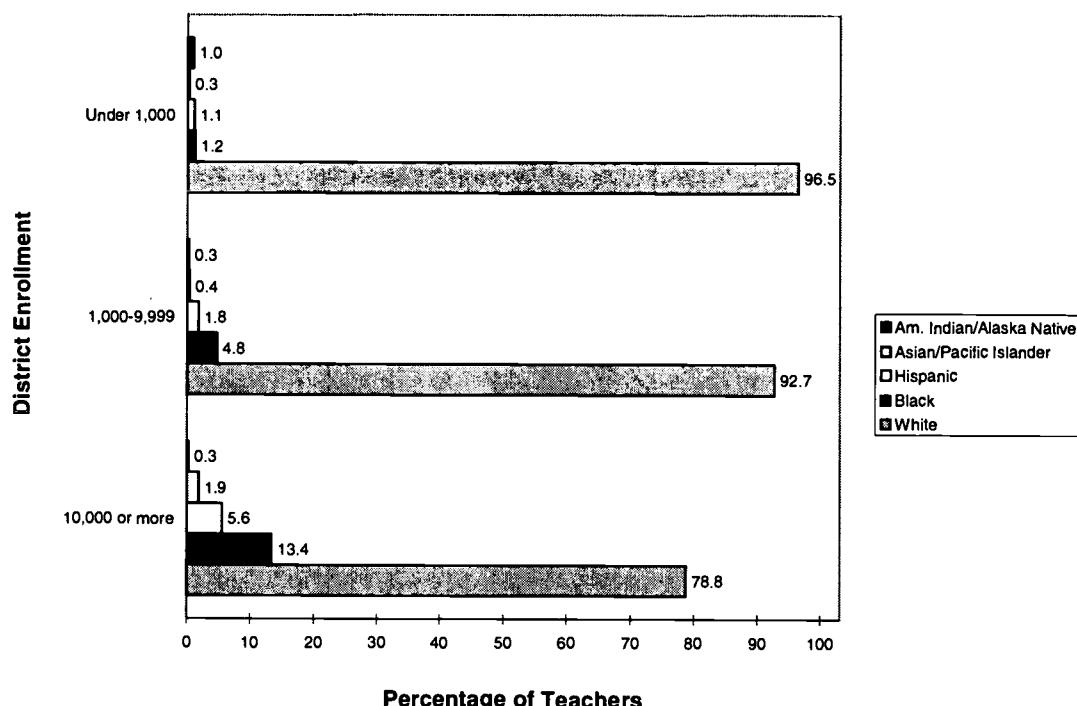


SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire).

District Size Differences and Trends

The faculty in small districts (i.e., fewer than 1,000 students) and medium-sized districts (i.e., 1,000 to 9,999 students) were less racially and ethnically diverse than the faculty in large school districts of 10,000 or more students (figure 2.15 and appendix A, table 9). This is similar to the situation for students. Minorities accounted for 4 percent of teachers in small school districts (i.e., fewer than 1,000 students) and 7 percent of teachers in medium-sized school districts (i.e., 1,000 to 9,999 students), compared with 21 percent of teachers in large school districts of 10,000 or more students.

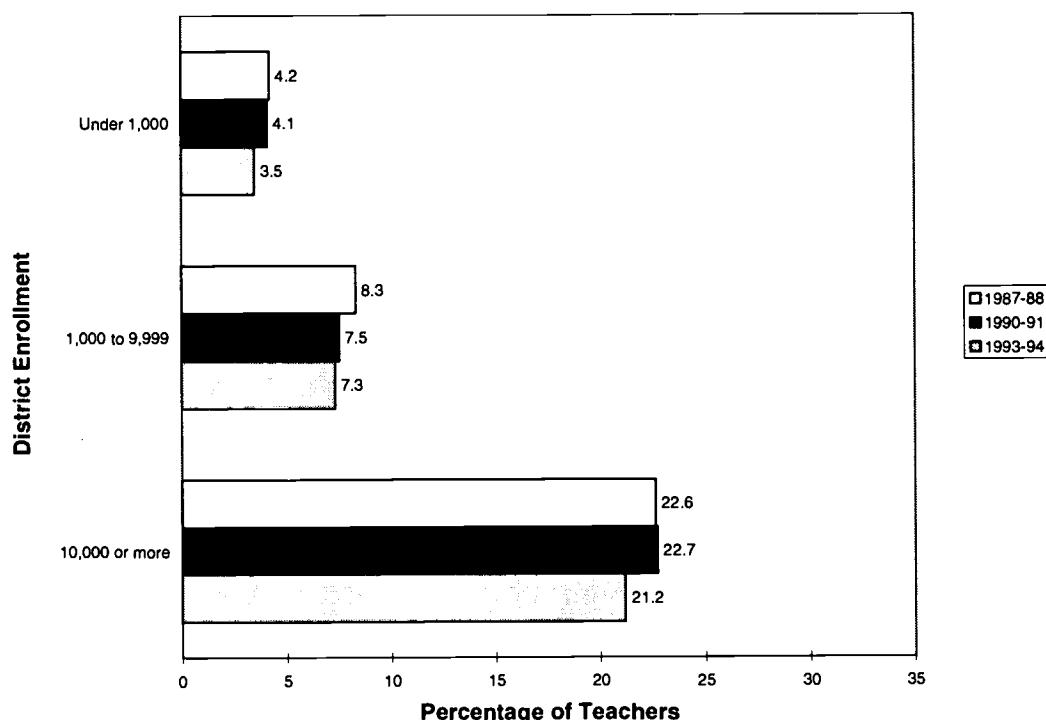
Figure 2.15—Percentage distribution of teachers by race and ethnicity, by district size: 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, School and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Black teachers were the predominant minority group on the faculty of large and medium-sized school districts, where they accounted for 13 percent and 5 percent of teachers, respectively. Hispanics were the second largest minority group of teachers in these districts, representing 6 percent of teachers in large districts and 2 percent in medium-sized districts. Meanwhile, the number of Black, Hispanic, and American Indian or Alaska Native teachers was about equal across the smaller districts that enrolled fewer than 1,000 students. Each of these three minority groups accounted for about 1 percent of teachers in small school districts. The proportions of minorities on the teaching staff of small and medium-sized districts in 1993-94 compared with 1987-88 was about the same whereas the proportion of minorities on the teaching staff of large school districts was slightly smaller in 1993-94 compared with previous years (figure 2.16 and appendix A, table 7). Although the representation of minorities in the student population of large school districts appeared to be on the rise, the representation of minorities on the faculty of large school districts was diminishing.

Figure 2.16—Percentage of minority teachers, by district size: 1987-88, 1990-91, and 1993-94



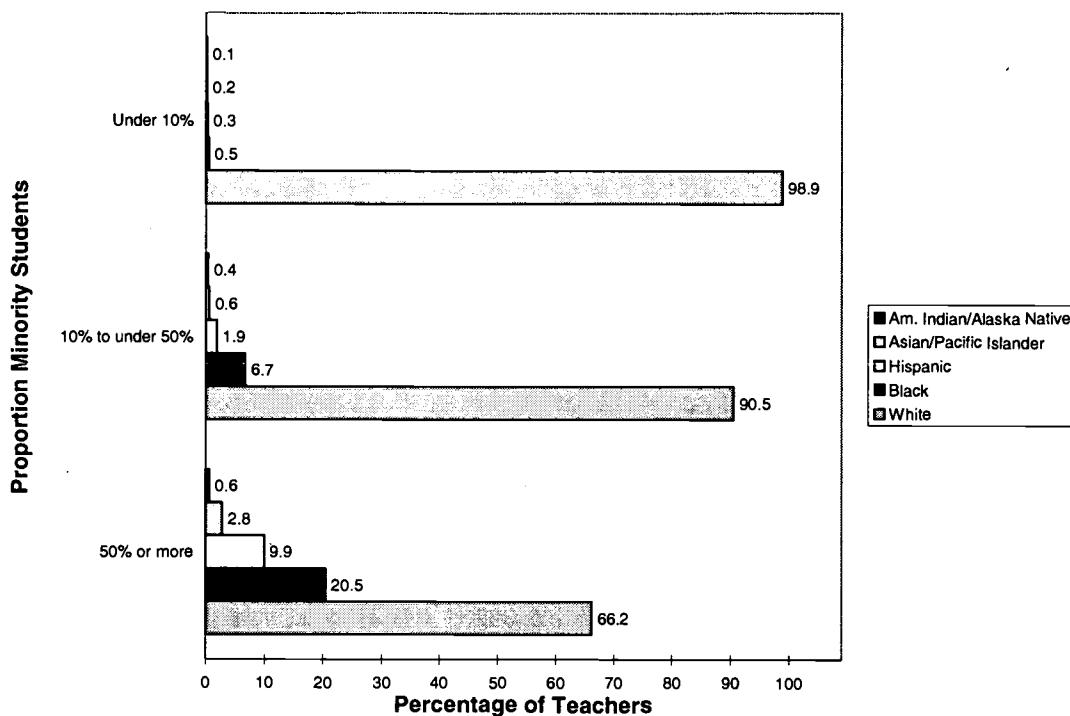
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Differences and Trends by Proportion of Minority Students

Although a larger proportion of the faculty tended to be from minority groups in districts where minorities accounted for a larger proportion of student enrollment, white, non-Hispanic teachers were the predominant racial-ethnic group regardless of the representation of minorities in the student population. Among school districts in which 90 percent or more of the students were white, the faculty was almost exclusively white, non-Hispanic (99 percent) in 1993-94. Among school districts with 10 to less than 50 percent minority enrollment, 9 out of 10 teachers (91 percent) were white, non-Hispanic (figure 2.17 and appendix A, table 9). In school districts in which minority students outnumbered white, non-Hispanic students, two-thirds (66 percent) of teachers were still of white, non-Hispanic origin. A similar pattern was found in every region of the country (appendix A, table 9).

Regardless of the percentage of minority students in a district, Black teachers represented the largest minority faculty group, followed by Hispanics (figure 2.17). Black teachers made up 21 percent, Hispanic teachers 10 percent, and Asian and Pacific Islanders 3 percent of the faculty in school districts where half or more of the students were from minority groups. Among districts in which the minorities represented between 10 and less than 50 percent of students, the representation of Black and Hispanic teachers dropped to 7 percent and 2 percent, respectively. Asian and Pacific Islanders represented less than 1 percent of teachers in such school districts. American Indian and Alaska Native teachers constituted less than 1 percent of the teachers regardless of the category of percentage of minority students.

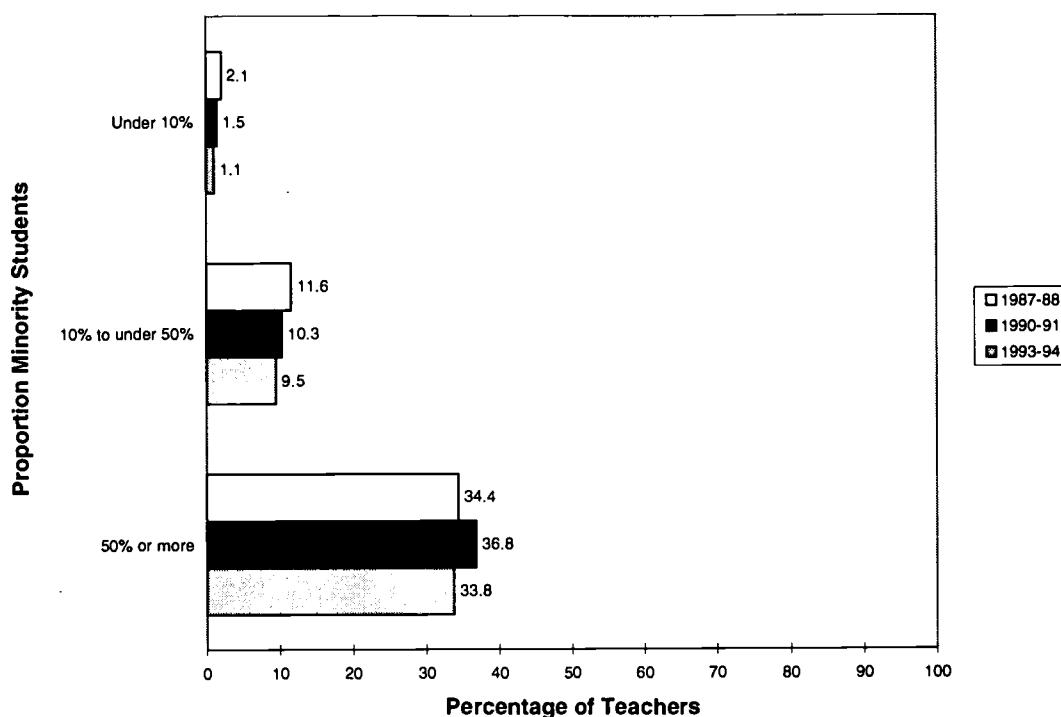
Figure 2.17—Percentage distribution of teachers by race and ethnicity, by proportion of minority students in the district: 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

The trend between 1987-88 and 1993-94 among districts with fewer than 50 percent minority students was toward a slightly lower percentage of minorities on the teaching staff (figure 2.18 and appendix A, table 7). Among districts with fewer than 10 percent minority students, the proportion of minority teachers was 2 percent in 1987-88, compared with 1 percent in 1993-94. Among districts with 10 to 50 percent minority student enrollment, the representation of minorities on the faculty was about 10 percent in 1993-94, compared with 12 percent in 1987-88. Meanwhile, the representation of minorities on the faculty of districts with 50 percent or more minority student enrollment remained relatively constant.

Figure 2.18—Percentage of minority teachers, by proportion of minority students in district: 1987-88, 1990-91, and 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Chapter 3

Newly Hired Teachers

Overview

Seven-eighths (88 percent) of the school districts in the country reported hiring teachers in the 1993-94 school year who were not employed in the district as teachers in the previous year. These newly hired teachers included newly prepared teachers (i.e., first-year teachers who were attending college or earning their highest degree in the previous year), delayed entrants (e.g., first-year teachers who had engaged in other activities in the year(s) subsequent to earning their highest degrees), transfers (e.g., teachers who were employed as teachers in other states or in private schools in the previous year), and re-entrants (e.g., former teachers who were not teaching elementary or secondary school in the past year).⁷ As a result there were approximately 200,000 newly hired full-time equivalent (FTE) teachers in 1993-94. Accordingly, 8 percent of the FTE public school teachers in the country were either teaching in districts in which they had not taught in the previous year or were teaching for the first time (appendix A, table 11).

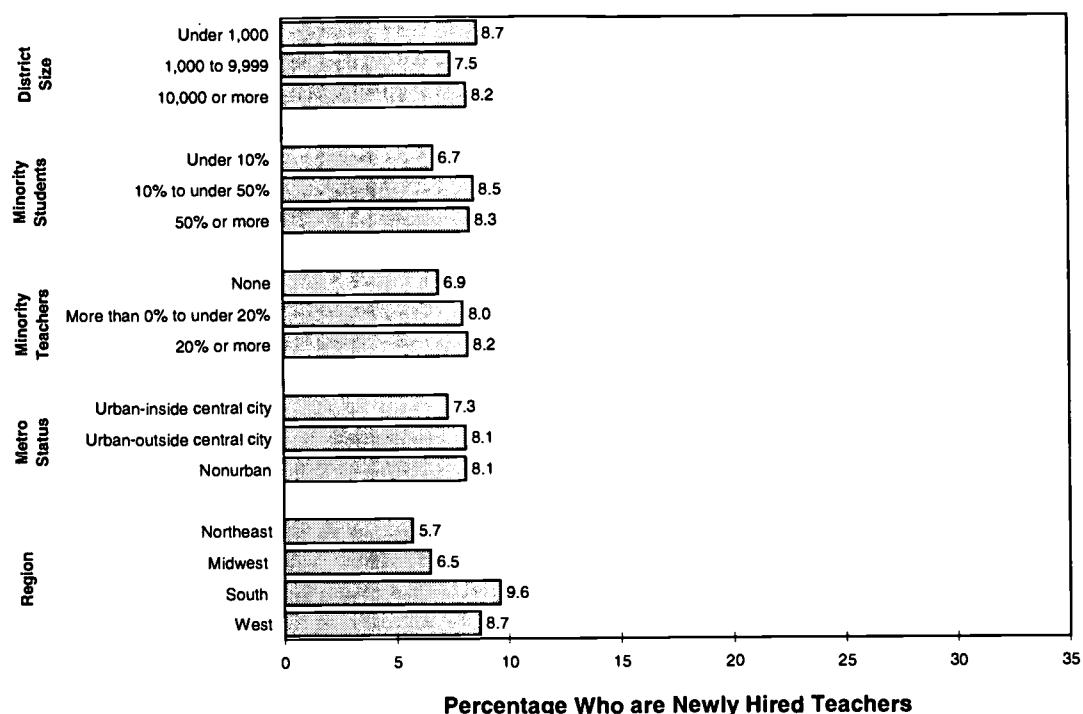
Extent of New Hires in Public School Districts

Hiring rates were associated with the region of the country in which a district was located. Regionally, the percentages of newly hired teachers were highest for districts in the South (10 percent) followed by districts in the West (9 percent), and lowest for districts in the Northeast (6 percent) (figure 3.1). In eight states, at least 10 percent of the FTE teaching staff was newly hired teachers (appendix A, table 49). Each of these states were located in regions in the South (Georgia, Mississippi, North Carolina) or West (Arizona, Hawaii, Nevada, New Mexico, and Texas) of the country.

Newly hired teachers were most prevalent in urban areas inside central cities and other urban districts of the South, where they constituted 10 percent of the FTE teaching staff (appendix A, table 11). In contrast, only 4 percent of teachers in central city school districts in the Northeast were newly hired. Unlike the situation in the South, urban areas inside central city school districts overall had a slightly lower percentage of newly hired teachers compared with other urban or nonurban districts (figure 3.1).

⁷ In 1990-91, about one-third (34 percent) of the newly hired teachers were newly prepared; 31 percent were re-entrants; 19 percent were delayed entrants; and 16 percent were transfers. (Rollefson 1995).

Figure 3.1—Percentage of full-time equivalent teaching staff that consists of newly hired teachers, by selected district characteristics: 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Certification of Newly Hired Teachers

Standard State Certification

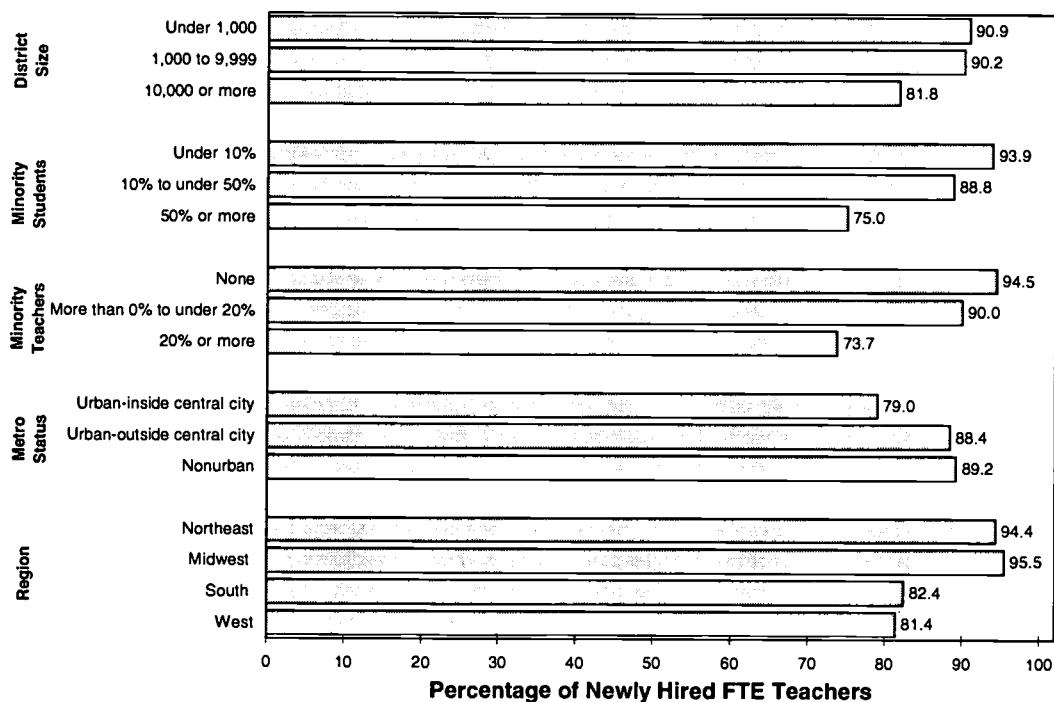
Although all states have standards for teacher certification, state certification is not a requirement for employment as a teacher. In 1993-94, 87 percent of newly hired teachers possessed regular or standard state certification in their field of assignment⁸ (appendix A, table 12).

The proportions of new teachers with standard state certification in their field of assignment were higher for districts in the Midwest (96 percent) and Northeast (94 percent), compared with districts in the South (82 percent) and West (81 percent) (figure 3.2). In several states, nearly all (98 percent or more) of the newly hired teachers were fully certified in their field of assignment (appendix A, table 50). Although many of these states were in the Midwest

⁸ On the Schools and Staffing Survey 1993-94 School Year Teacher Demand and Shortage Questionnaire for Public School Districts (LEAs), respondents were instructed that teachers "who have completed all necessary course work and practice teaching, and are eligible for full certification upon completion of a probationary period" should be counted as teachers possessing regular or standard state certification in their assigned field. The terms "assigned field" and "fields of assignment" are used in the questionnaire but are not defined.

and Northeast (e.g., New York, North Dakota, Rhode Island, Vermont), several states in the West also reported these high levels of certification (Alaska, Montana, Nevada, and Washington).

Figure 3.2—Percentage of newly hired teachers (full-time equivalent) with standard state certification in assignment field, by selected district characteristics: 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Proportionally fewer of the newly hired teachers in districts in urban areas inside central cities were certified in their field of assignment than those hired in other public school districts. In these central city school districts, 79 percent of the new teachers were certified in their field of assignment, compared with 88 percent in other urban districts and 89 percent in nonurban districts (figure 3.2).

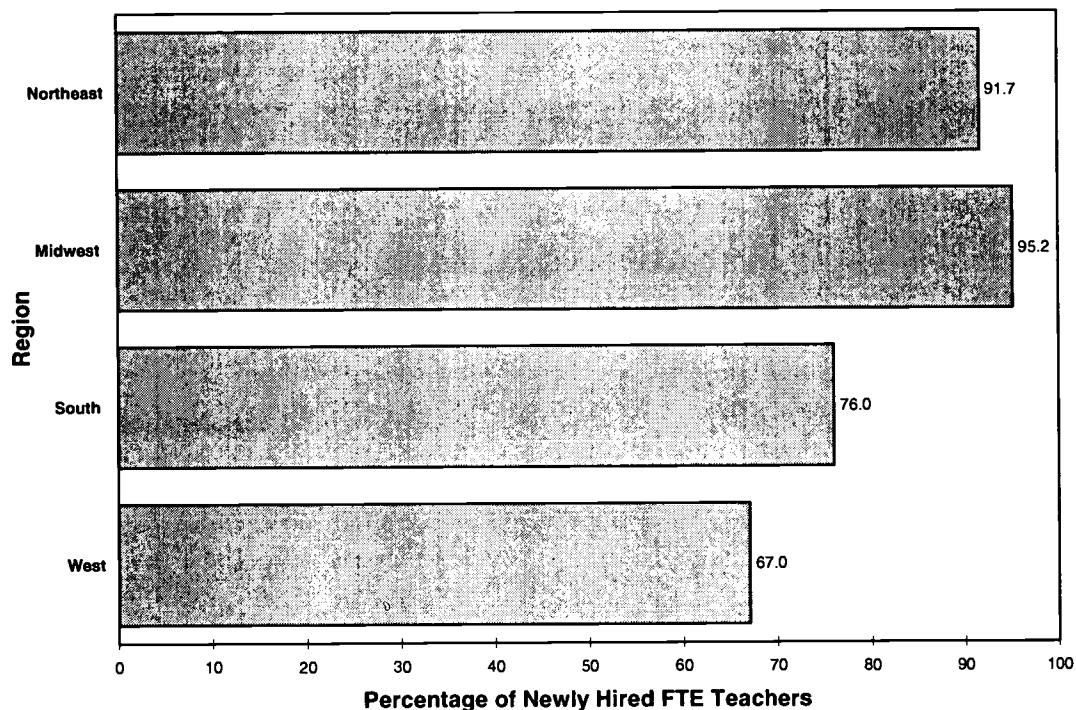
The proportions of new hires with standard certification in their field of assignment were the lowest in large districts with an enrollment of 10,000 or more students. In these districts, 82 percent of newly hired teachers were fully certified in their field of assignment, compared with 90 percent of these teachers in districts with less than 1,000 students and 91 percent of these teachers in districts serving 1,000 to 9,999 students.

The percentage of newly hired teachers certified in their field of assignment was lowest in districts with the highest proportions of minority students, and was highest in districts with the lowest proportions of minority students. In predominantly white districts (i.e., with less than 10 percent minority enrollment), 94 percent of newly hired teachers were fully certified in their field of assignment, compared with only three-quarters of the teachers in districts where minorities constituted one-half or more of the student population. Similarly, the proportion of newly hired teachers with standard certification in their field of assignment

was highest in districts that employed only white teachers (95 percent) and was lower in districts with relatively more minority teachers. In districts where the teaching staff was comprised of 20 percent or more minority teachers, about three-quarters (74 percent) of the newly hired teachers were fully certified in their field of assignment.

Regional differences in proportions of newly hired teachers with certification in their field of assignment were particularly pronounced in districts in urban areas inside central cities (figure 3.3). The proportions certified in their field of assignment in central city districts of the Midwest and Northeast were about 95 percent and 92 percent, respectively, compared with three-quarters (76 percent) of newly hired teachers in central city districts in the South and only two-thirds (67 percent) of newly hired teachers employed by districts in urban areas inside central cities in the West.

Figure 3.3—Percentage of newly hired teachers (full-time equivalent) with standard state certification in assignment field in districts in urban areas inside central cities, by region: 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Emergency Certification

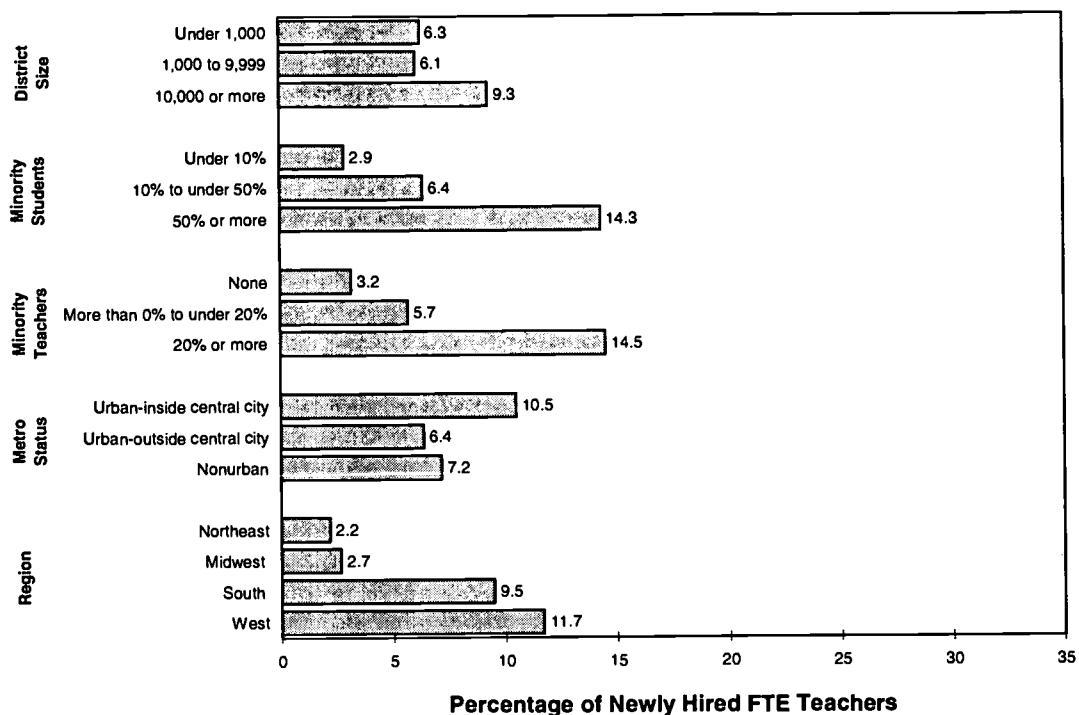
In lieu of regular or standard state certification, many newly hired teachers apply for and are granted emergency certificates. These emergency certificates are intended as short term measures for people with insufficient preparation for their teaching assignment. Grantees are required to complete a certification program in order to continue teaching in their assignment field. For example, in California, a teacher undergoing the additional training necessary for certification as a special educator is often fully certified in other teaching areas.

This person may be granted an emergency certificate or a waiver while taking additional course work required for employment as a special education teacher (Doorlag et al. 1994).

The practice of granting emergency certifications is fairly common. New teachers with emergency certifications were found in over one-fifth of the nation's school districts in 1993-94 (appendix A, table 12). In districts that employed this practice, over one-sixth (17 percent) of newly hired teachers had emergency certifications. Among all newly hired teachers, about 8 percent were granted emergency certification. In other words, of the 14 percent of the nation's newly hired teachers who lacked regular or standard state certification in their field of assignment in 1993-94, over half (56 percent) had emergency certification.

The proportions of newly hired teachers with emergency certification were several times greater in the South (10 percent) and West (12 percent) than in the Northeast (2 percent) and Midwest (3 percent) (figure 3.4). About one-fifth of newly hired teachers in California and Louisiana were granted emergency certification (appendix A, table 50).

The proportion of newly hired teachers with emergency certification was greater in districts in urban areas inside central cities (11 percent) than in other districts (6 to 7 percent) (figure 3.4). However, there was considerable regional variation among central city districts with respect to the proportions of newly hired teachers with emergency certification. One-fifth of the newly hired teachers in central city school districts in the West had emergency certification, compared with one-tenth of such teachers in central city school districts in the South, 4 percent of newly hired teachers in central city school districts in the Midwest and 3 percent in the Northeast (appendix A, table 12).

Figure 3.4—Percentage of newly hired full-time equivalent teachers with emergency certification, by selected district characteristics: 1993-94

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

In districts where the student enrollment was predominantly minority, one in seven (14 percent) newly hired teachers lacked standard state certification for their position but had emergency certification (figure 3.4). This proportion was greater than in districts that were between 10 and 50 percent minority (6 percent), which, in turn, was greater than in districts that were less than 10 percent minority (3 percent). The same pattern characterized districts with the highest proportions of minority teachers, moderate proportions, and no minority teachers. In the districts with the highest proportions of minority teachers, over one in seven (15 percent) of the newly hired teachers had only emergency certification; in districts that had no minority teachers, only 3 percent of the newly hired teachers held emergency certification.

Finally, the proportion of new teachers with emergency certification was higher in school districts with at least 10,000 students (9 percent) than in districts of smaller sizes (about 6 percent).

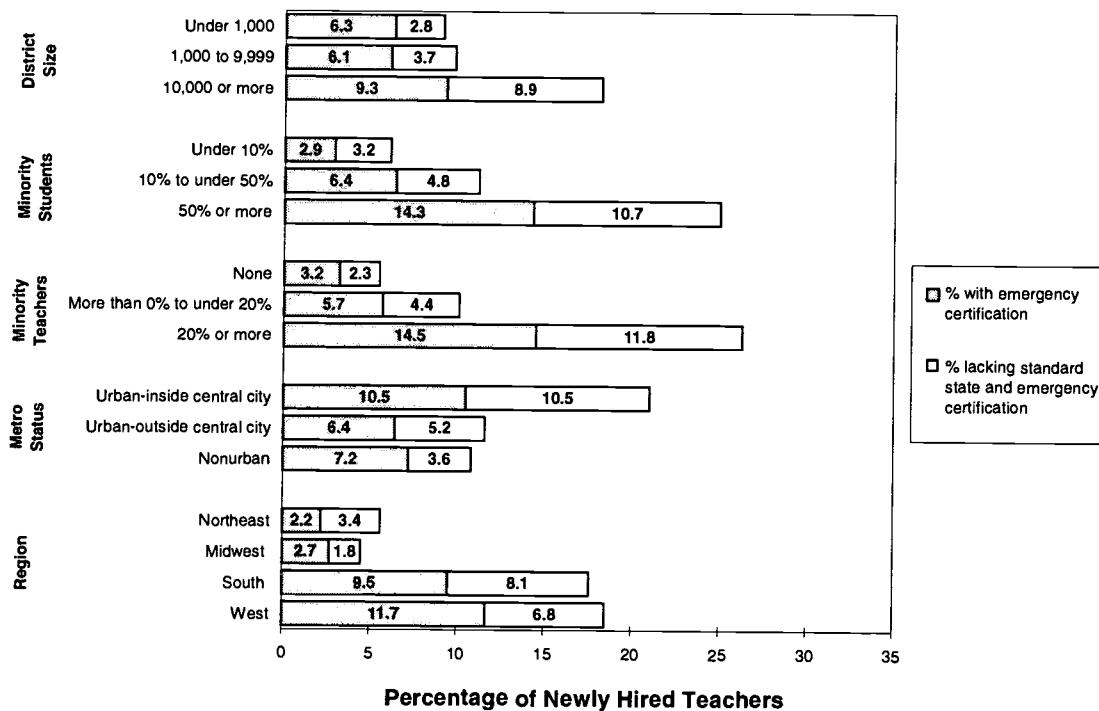
Newly Hired Teachers Lacking Emergency Certification or Standard State Certification in Their Field of Assignment

In 1993-94, 6 percent of the newly hired public school teachers in the country were neither certified in their fields of assignment, nor did they have emergency certification (appendix A, table 12). The largest percentages of newly hired teachers lacking both of these types of certification were in districts in the South (8 percent) and West (7 percent). Fewer than 2 percent of newly hired teachers in the Midwest, compared with about 8 percent of newly hired teachers in the South, lacked regular (standard) and emergency certification for

teaching (figure 3.5). The proportion of newly hired teachers in districts in urban areas inside central cities (11 percent) that lacked either form of certification was at least twice that of newly hired teachers in other urban (5 percent) and nonurban (4 percent) districts. However, teachers lacking either form of certification could possess alternate route certifications or be certified in fields other than their fields of assignment.⁹

New teachers lacking both state certification in their field of assignment and emergency certification were more prevalent in districts with a predominantly minority student population and in districts where more than 20 percent of the teachers were members of minority groups. About one quarter of the newly hired teachers in these districts had only emergency certification or lacked both standard and emergency certification (figure 3.5 and appendix A, table 12).

Figure 3.5—Certification status of newly hired teachers (full-time equivalent) lacking standard state certification in assignment field, by selected district characteristics: 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

⁹ The numbers of teachers with alternate certifications and the numbers of teachers with certifications outside of their fields of assignment could not be estimated from Schools and Staffing Survey 1993-94 Teacher Demand and Shortage Questionnaire for Public School Districts (LEAs) since this instrument did not include any items asking about the numbers of these kinds of newly hired teachers.

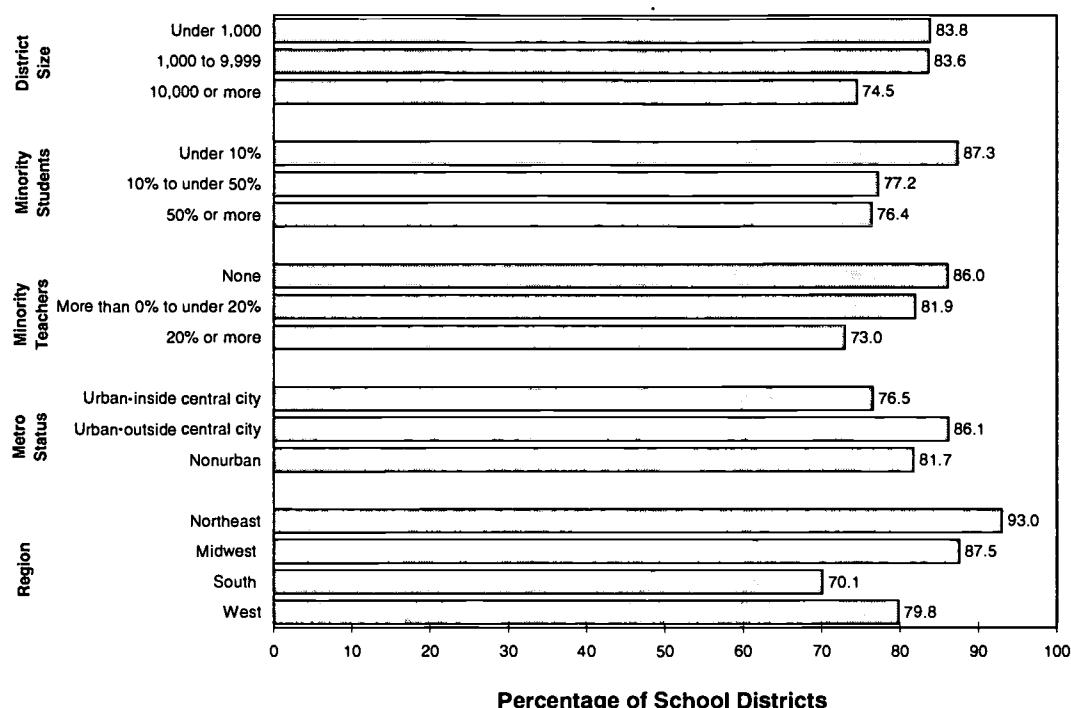
District Criteria for Screening Applicants for Teaching Positions

Districts use various criteria in considering applicants for teaching positions. These include the following: (a) full standard state certification in the field to be taught, (b) at least emergency or temporary state certification or endorsement in the field to be taught, (c) graduation from a state-approved teacher education program, (d) a college major or minor in the field to be taught, (e) passage of a STATE test of basic skills, (f) passage of a STATE test of subject knowledge, (g) passage of a local DISTRICT test of basic skills or subject knowledge, (h) passage of the National Teachers Exam—Core battery, and (i) passage of the National Teachers Examination—Professional Specialty Area. In 1993-94, the most common criterion that districts reported requiring of teaching applicants was standard state certification (appendix A, table 13). Five-sixths (83 percent) of the country's school districts had this requirement. Of the remaining school districts, nearly all used but did not require state certification in considering teaching applicants. Almost all districts (99.7 percent) reported that they at least used state certification as a criterion in considering teaching applicants.

It should be noted that requiring applicants to meet a specific criterion (such as possession of standard state certification for the field to be taught) does not mean that all successful applicants meet this criterion. In districts requiring that teaching applicants possess standard state certification for the field to be taught, 7 percent of the newly hired teachers lacked this qualification. Nonetheless, the proportions of fully certified new teachers were highest in districts with a state certification employment requirement. Districts that used but did not require state certification for the field to be taught reported that 16 percent of their newly hired teachers lacked state certification for the field to be taught; districts that did not use this criterion reported 21 percent.

School districts in the Northeast, compared with those in the South and the West, were most likely to have a standard certification requirement (figure 3.6). About 93 percent of districts in the Northeast required standard certification in the field to be taught of teaching applicants, in contrast to 70 percent of school districts in the South and 80 percent in the West.

Figure 3.6—Percentage of school districts requiring standard state certification in field to be taught in considering applicants for teaching positions, by selected district characteristics: 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-84 (Teacher Demand and Shortage Questionnaire).

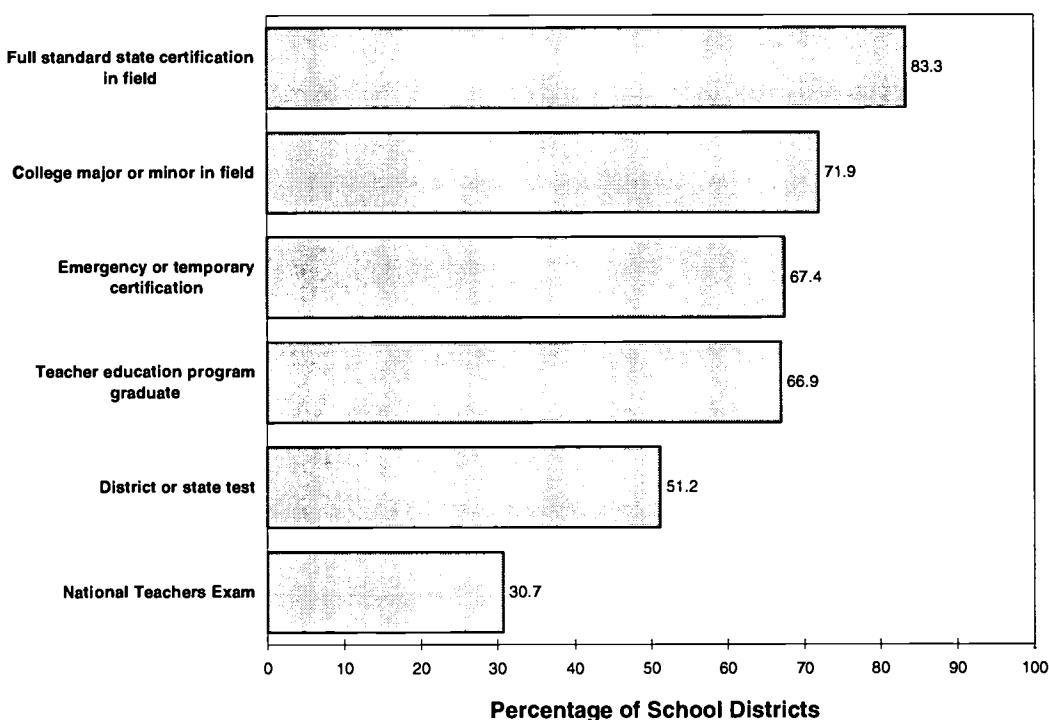
Districts in urban areas inside central cities (77 percent) were less likely than other urban (86 percent) and nonurban (82 percent) districts to require standard teacher certification. However, this varies by region of the country. Comparable proportions of districts serving central cities, districts in urban areas outside central cities, and districts in nonurban areas in the South (74 percent) and in the Midwest (89 percent) required that standard certification in the field be used as a criterion in considering teaching applicants (appendix A, table 13). However, central city districts in the Northeast were less likely than nonurban districts in the Northeast to mandate standard teacher certification in the field to be taught by applicants (86 percent in central city districts versus 94 percent in nonurban districts).

Districts with 10,000 or more students (75 percent) were less likely than districts of other sizes (about 84 percent) to require standard teacher certification in the field to be taught by applicants (figure 3.6). Similarly, districts with higher proportions of minority students (i.e., from 10 percent to less than 50 percent) were less likely to have this requirement than districts with lower proportions of minority students. About three-quarters (77 percent) of the districts with 10 percent to less than 50 percent minority students and about three-quarters (76 percent) of the districts whose enrollment was predominantly minority (i.e., 50 percent or more) required standard certification in the field of assignment to be considered in evaluating teaching applicants, compared with about seven-eighths (87 percent) of the districts where minorities made up less than 10 percent of the student body. Districts in which minorities comprised at least 20 percent of the teaching staff were also less likely to have this requirement than districts employing proportionately fewer minority teachers. About three-quarters (73 percent of these districts required consideration of standard

certification in the field of assignment in evaluating teaching applicants compared with 82 percent of the districts that employed some, but proportionately few minority teachers and 86 percent of the districts that did not employ any minority teachers.

School districts reported that other factors were frequently required of teaching applicants (figure 3.7). About two-thirds of the districts required a college major or minor in the field to be taught (72 percent), emergency or temporary certification for the field to be taught (67 percent), or graduation from a state-approved teacher education program (67 percent). About half (51 percent) of the districts required passage of either state or district tests of basic skills or subject knowledge; less than one-third (31 percent) required passage of either the core battery or the professional specialty area of the National Teachers Examination (NTE).

Figure 3.7—Percentage of school districts with various criteria required for considering applicants for teaching positions: 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

There were regional differences in the specification of testing requirements. Districts in the Northeast were more likely than other districts to require that teaching applicants pass some part of the NTE (appendix A, table 13). Half (50 percent) of the districts in the Northeast required that applicants pass the NTE core battery or professional specialty area in order to be considered for teaching positions, in contrast to three-eighths (38 percent) of the districts in the South, about one-quarter (29 percent) of the districts in the West, and one-sixth (17 percent) of the districts in the Midwest. Conversely, the districts in the Northeast (41 percent) were less likely than districts in the South (69 percent) or West (58 percent) to require that teaching applicants pass a state or district test in order to be considered for a teaching position.

Districts in regions with the lowest proportions of fully certified, newly hired teachers were more likely than other districts to require that passage of a state or district test of basic skills or subject knowledge be used in considering teaching applicants. Over two-thirds (69 percent) of the districts in the South and 58 percent of the districts in the West required passage of these tests.

Chapter 4

Teacher Demand and District Efforts to Recruit and Retain Teachers

Overview

Fears of an impending teacher shortage were raised by several well-publicized reports in the early 1980s.¹⁰ These fears were an underlying motivation for a large-scale national survey to permit monitoring of teacher supply and demand. The SASS Teacher Demand and Shortage Questionnaire (TDS) collected information about a variety of teacher supply and demand indicators, such as the numbers and distribution of newly hired teachers and their qualifications; teacher hiring requirements (all discussed in chapter 3); the number and distribution of teacher vacancies that were unable to be filled by permanent teachers; the number and percentage of teaching positions abolished, withdrawn, or filled by substitute teachers because of budget cuts; the number of teachers laid off; and district efforts to recruit and retain teachers. These data provide information about the prevalence and distribution of teacher supply and demand imbalances and how they have changed over time.

In spite of projections of increasing demand for teachers and decreasing supply of teachers, teacher shortages did not manifest themselves as predicted. School districts have been very successful in filling their teacher vacancies. Very few unfilled teaching positions were reported in either 1987-88, 1990-91, or 1993-94: the number of approved FTE teaching positions that were not filled by permanent teachers declined from 22,978 in 1987-88 (1.0 percent of the total number of FTE teaching positions) to 14,287 in 1990-91 (0.6 percent of the FTE teaching positions) to 8,691 in 1993-94 (0.3 percent of the FTE teaching positions) (appendix A, table 17). This was not a reflection of reduced demand for teachers. In 1993-94, almost no approved teaching positions (5,372, or 0.2 percent) were abolished, withdrawn, or filled by substitute teachers because of budget cuts; very few teachers (11,910, or 0.5 percent) were laid off because of budget limitations, declining enrollments, or course elimination (appendix A, tables 18 and 19). Furthermore, the number of teachers employed in the nation's public elementary and secondary schools increased from 2,511,304 in 1987-88 to 2,565,862 in 1990-91 to 2,599,569 in 1993-94 (appendix A, table 7).

Even though the predicted shortages in the quantity of teachers have not occurred, many teachers are assigned to teach classes for which they lack a college major or minor.¹¹ For example, in 1990-91, over half (56 percent) of the students enrolled in physical science

¹⁰ National Commission on Excellence in Education (1983); Darling-Hammond (1984).

¹¹ Ingersoll (1996b).

courses in grades 7 to 12 were taught by teachers who lacked at least a college minor in the field; over half in history or world civilization courses were taught by teachers lacking at least a minor in history. This mismatch is worse in certain kinds of school districts: in high-poverty districts, nearly three-quarters (71 percent) of secondary school students in physical science classes were taught by a teacher lacking at least a minor in the field; in low-poverty districts, 50 percent were taught by teachers lacking this educational background.¹²

In 1993-94, 4,357 districts offered pay incentives (i.e., cash bonuses, salary step increases, or other salary increases) and/or provided free training to hire or retain teachers to teach in particular content areas or to teach in less desirable locations. From a microeconomic perspective, these pay incentives and free training are indicators that the district feels that special measures need to be undertaken to deal with existing or potential teacher shortages in these content areas or locations.

From a macroeconomic perspective, small levels of shortages will invariably exist in broad and geographically diverse labor markets. Raising salaries to levels where shortages would be totally eliminated would be inefficient, creating teacher surpluses in other labor markets. From this perspective, the goal of pay incentives is not to eliminate all teacher shortages but to create an efficient labor market that matches supply and demand across labor markets without producing surplus. The large number of districts offering these incentive programs can be seen as an indication that the compensation system is responding efficiently to solve the problem of possible shortages in some districts without creating surpluses in others.

Fields of Shortage

In 1993-94, some districts offered pay incentives and/or free staff training to deal with current or anticipated teacher shortages in specific fields. The largest districts (i.e., those serving at least 10,000 students) were more likely to take each of these actions than were districts of other sizes (table 4.1 and appendix A, table 22). In 1993-94, 20 percent of the largest districts offered pay incentives, and 35 percent offered free training to deal with teacher shortages. Only 11 percent of districts enrolling 1,000 to 9,999 students and 9 percent of districts enrolling fewer than 1,000 students offered pay incentives for this purpose; only 19 percent of districts enrolling 1,000 to 9,999 students and 18 percent of the smaller districts offered free training for this purpose. Central city school districts were much more likely to offer either of these pay incentives than districts located elsewhere. For example, 20 percent of the nation's central city districts offered any of these pay incentives, in contrast to about 10 percent of the other districts; 29 percent offered free training, in contrast to 18 percent of the districts in urban areas outside central cities and 20 percent of the nonurban districts.

¹² Ingersoll (1996a).

Table 4.1—Percentage of school districts using pay incentives to recruit or retain teachers or offering free training to prepare staff members to teach in fields of shortage, by selected district characteristics: 1993-94

District Characteristic	Pay Incentives	Free Training
TOTAL	10.2	19.0
District Size		
Under 1,000	8.9	17.5
1,000 to 9,999	10.7	19.1
10,000 or more	19.9	34.5
Minority Students^a		
Under 10%	7.3	15.0
10% to under 50%	11.7	20.7
50% or more	23.1	37.3
Minority Teachers		
None	7.6	14.4
More than 0% to under 20%	11.7	21.2
20% or more	19.1	38.0
Metro Status		
Urban -inside central city	20.1	28.5
Urban -outside central city	9.9	17.5
Nonurban area	9.8	19.5
Region		
Northeast	6.0	13.5
Midwest	8.3	13.1
South	16.8	26.6
West	11.0	27.7

(a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

There was also a strong relationship between the racial composition of a district's student population and the presence of shortage field incentives. Nearly one-quarter (23 percent) of school districts which were at least 50 percent minority provided pay incentives for this purpose (appendix A, table 22). About one-eighth (12 percent) of the districts with a student minority composition ranging from 10 percent to under 50 percent and just 7 percent of the districts with fewer than 10 percent minority students provided pay incentives for this purpose. Similarly, 37 percent of the predominantly minority districts offered free training for this purpose, in contrast with 21 percent of the districts whose student population ranged from 10 percent to under 50 percent minority and 15 percent of the districts with fewer than 10 percent minority students (table 4.1).

If prevalence of pay incentives is an indicator of shortage magnitude, the field in which shortages are greatest is special education (appendix A, table 23). Pay incentive and free training strategies to deal with special education teacher shortages were most prevalent in the largest (i.e., with enrollments of at least 10,000 students) districts. The largest districts were more likely to use pay incentives (13 percent) and free training (19 percent) to deal

with actual or anticipated special education teacher shortages than other districts (5 to 7 percent offering pay incentives; 12 percent offering free training) (table 4.2). Similarly, districts with the highest proportions (20 percent or more) of minority teachers were more likely to offer free training (22 percent) to recruit or retain special education teachers than other districts (10 to 13 percent).

Similarly, districts in urban areas inside central cities were more likely to use pay incentives (16 percent) to deal with actual or anticipated special education teacher shortages than other districts (6 percent). Central city school districts were also more likely to offer free special education teacher training (14 percent) than districts in urban areas outside central cities (9 percent).

In 1993-94, at least 3 percent of the nation's school districts used pay incentives and at least 10 percent offered free training to deal with teacher shortages in math and ESL or bilingual education instruction. The largest districts, the districts with the highest concentrations of minority students and teachers, districts in urban areas inside central cities, and districts in the West and South were most likely to provide free training or pay incentives to deal with ESL/bilingual teacher shortage strategies. This may reflect their higher concentrations of Limited English Proficient/Non-English Proficient (LEP/NEP) students.

Efforts to prevent and reduce mathematics teacher shortages (i.e., through pay incentives and free training) were comparably prevalent in districts of different sizes. Pay incentives were offered in 4 percent of the smallest districts (under 1,000 students) and in 2 to 3 percent of the other districts; free math training was offered in 12 percent of the largest and smallest districts and in 11 percent of the districts serving between 1,000 and 9,999 students. Pay incentives for this purpose were more likely to be employed by school districts in the South (7 percent) than districts in other regions (ranging from 2 to 3 percent).

Table 4.2—Percentage of school districts using pay incentives to recruit or retain teachers to teach in fields of shortage or offering free training to prepare staff members to teach in fields of shortage by subject matter (special education, math, and ESL or bilingual education), by selected district characteristics: 1993-94

District Characteristic	Pay Incentives			Free Training		
	Special Education	Math	ESL or Bilingual Education	Special Education	Math	ESL or Bilingual Education
TOTAL	6.2	3.2	3.2	12.2	11.3	10.1
District Size						
Under 1,000	5.0	4.0	1.6	12.0	11.7	8.9
1,000 to 9,999	6.8	2.3	4.3	11.6	10.7	10.2
10,000 or more	12.8	2.8	9.9	18.6	12.2	23.1
Minority Students						
Under 10%	4.5	2.2	1.0	10.5	10.1	6.1
10% to under 50%	7.1	3.8	4.3	13.6	11.0	12.6
50% or more	13.0	7.5	12.4	17.4	18.7	26.4
Minority Teachers						
None	4.2	3.1	1.2	10.2	9.5	6.1
More than 0% to under 20%	7.4	3.2	4.3	12.7	11.9	13.0
20% or more	11.7	3.9	10.0	22.4	19.4	19.7
Metro Status						
Urban -inside central city	16.2	3.3	11.0	14.3	7.7	20.3
Urban -outside central city	5.8	2.4	3.8	8.9	9.3	10.6
Nonurban area	5.7	3.8	2.2	14.4	12.9	9.1
Region						
Northeast	3.7	1.8	0.9	9.2	9.3	5.9
Midwest	4.8	2.5	1.4	8.5	8.7	5.4
South	10.6	7.0	5.5	19.3	15.2	13.4
West	6.3	1.8	6.4	14.2	13.9	20.1

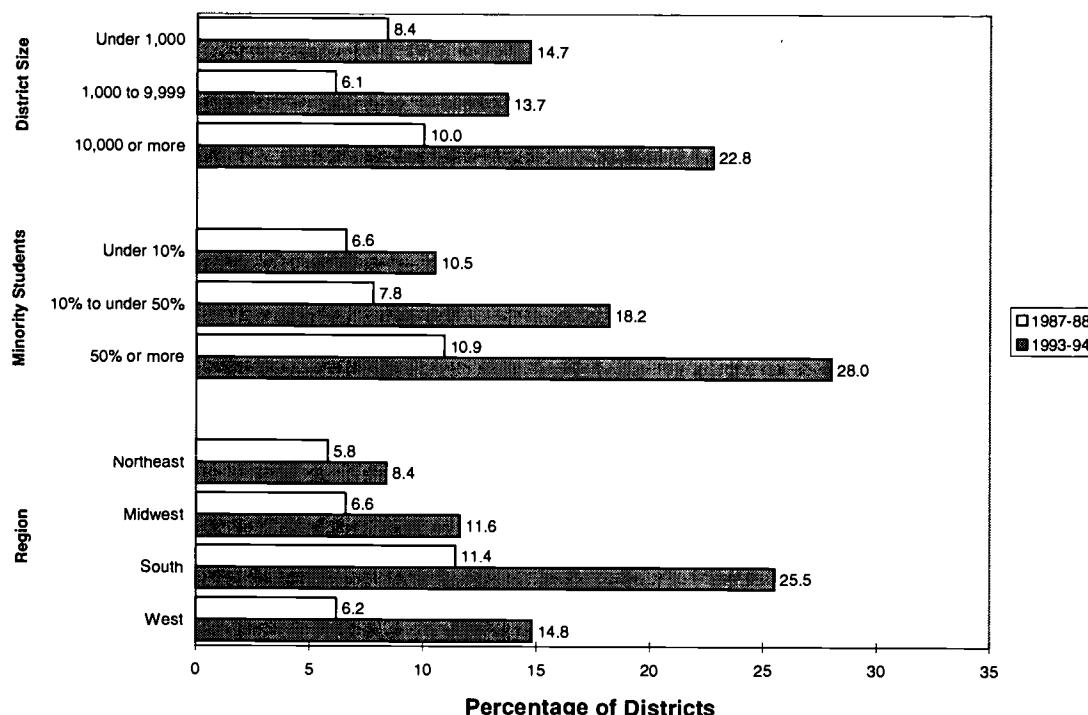
(a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Differences and Trends in the Prevalence of Pay Incentives

From 1987-88 to 1993-94, the proportions of school districts that used pay incentives to recruit or retain teachers to teach in less desirable locations or in fields of shortage nearly doubled, from 8 percent to 15 percent (appendix A, table 20). The prevalence of these practices increased in school districts regardless of their size, proportion of minority students, proportion of minority teachers, or metropolitan status (appendix A, table 20 and figure 4.1). These practices were more prevalent in 1993-94 than in 1987-88 in districts in the Midwest, South, and West.

Figure 4.1—Percentage of districts using pay incentives to recruit or retain teachers to teach in less desirable locations or in shortage fields, by selected district characteristics: 1987-88 and 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1987-88 and 1993-94 (Teacher Demand and Shortage Questionnaires).

In districts in the Northeast, their prevalence in 1993-94 (8 percent) was comparable to their prevalence in 1987-88 (6 percent). In 1993-94, districts in the South were more likely to use pay incentives for teacher recruitment and retention purposes than districts in other regions. About one-quarter (26 percent) of districts in the South offered these incentives, compared with 15 percent of districts in the West, 12 percent of districts in the Midwest, and 8 percent of districts in the Northeast. In Maine, Vermont, and New Hampshire, 2 percent or fewer of school districts offered these kinds of teacher incentives (appendix A, table 52).

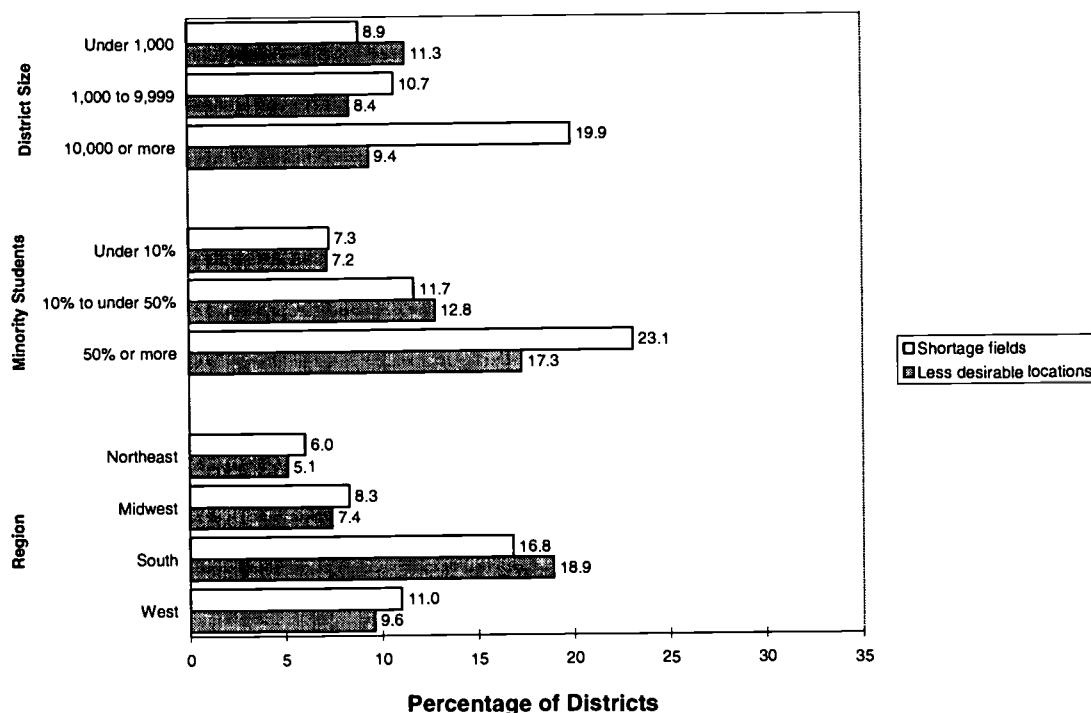
Pay incentives are a strategy that can be used to deal with different kinds of shortages. In 1993-94, about 10 percent of the nation's districts reported using pay incentives to attract or retain teachers in fields of shortage; 10 percent reported using pay incentives to attract or retain teachers to work in less desirable locations (appendix A, tables 21 and 22). About 6 percent of the nation's districts offered these incentives both to deal with shortage fields and for encouraging teachers to work in less desirable locations; 5 percent of the districts offered them to deal with shortage fields only; and 4 percent, to encourage teachers to work in less desirable locations only.

Districts that had the lowest concentrations of minority students (under 10 percent) were less likely than districts serving 50 percent or more minority students to use pay incentives to deal with shortage fields concerns and less likely than districts with minority student compositions ranging from 10 percent to 50 percent to use pay incentives to recruit or retain teachers to teach in less desirable locations than other districts (figure 4.2). Although the largest districts (those with enrollments of at least 10,000 students) were more likely to offer

pay incentives to deal with shortage field issues, comparable proportions of the largest districts (9 percent) and districts serving fewer than 1,000 students (11 percent) used this strategy to motivate teachers to teach in less desirable locations. Similarly, districts in urban areas inside central cities (20 percent) were more likely to use pay incentives to recruit or retain teachers to teach in fields of shortage than other districts (10 percent) (appendix A, table 22). However, comparable proportions of districts in urban areas inside central cities (11 percent), nonurban districts (11 percent) and districts in urban areas outside central cities (8 percent) offered pay incentives to motivate teachers to teach in less desirable locations (appendix A, table 21).

Districts in the South (19 percent) were more likely to use pay incentives to motivate teachers to teach in less desirable locations than districts in the West (10 percent), Midwest (7 percent), and Northeast (5 percent) (figure 4.2). They were also more likely to use pay incentives to deal with shortage field problems (17 percent) than districts in the Midwest (8 percent) or Northeast (6 percent).

Figure 4.2—Percentage of districts using pay incentives to recruit or retain teachers to teach in a) shortage fields and b) less desirable locations, by selected district characteristics: 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaires)

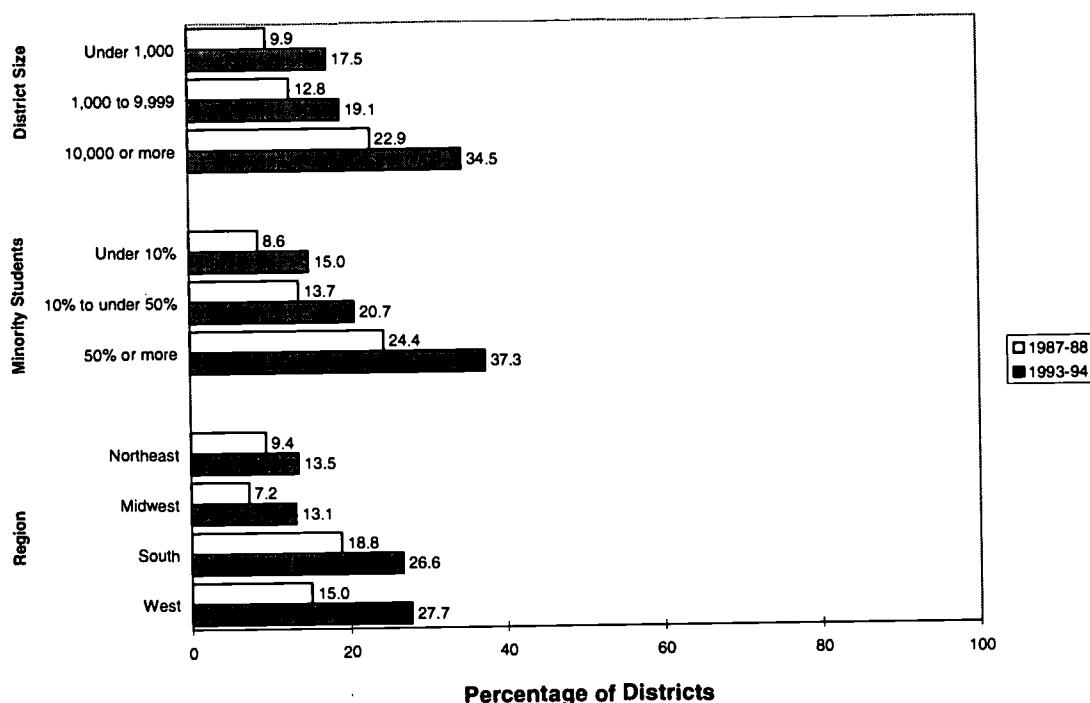
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Differences and Trends in the Prevalence of Free Training to Prepare Teachers for Shortage Fields

In addition to pay incentives, districts can also offer free training to prepare staff members to teach in fields with current or anticipated shortages. The number of districts offering free training, like the number of districts offering pay incentives, increased substantially from 1987-88 (12 percent) to 1993-94 (19 percent) (appendix A, table 24). And, like pay incentives, in 1993-94 this practice was more prevalent in districts regardless of their size, proportion of minority students, proportion of minority teachers, or metropolitan status than in 1987-88 (appendix A, table 24 and figure 4.3). In addition, free training to deal with specific shortage fields was more prevalent in 1993-94 than it was in 1987-88 in districts in all regions of the country.

In 1993-94, school districts in the West and South were more likely to provide free training to prepare teachers to teach in shortage areas than school districts in other regions. About one-quarter of the school districts in the West (28 percent) and South (27 percent) offered this training, compared with 14 percent of districts in the Northeast, and 13 percent of districts in the Midwest. This finding may indicate that districts in the South and West were having greater difficulties hiring teachers in shortage fields than were districts in other parts of the country.

Figure 4.3—Percentage of districts offering free training to prepare staff to teach in shortage fields, by selected district characteristics: 1987-88 and 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1987-88 and 1993-94 (Teacher Demand and Shortage Questionnaires).

Chapter 5

Teacher Compensation

Overview

The issue of teacher compensation is one of importance for educators, policymakers, and the general public. This issue reflects the common belief that salary and benefit packages are important in attracting, motivating, and retaining quality teachers.¹³

Compensation patterns must reflect the forces of supply and demand and local labor markets. Teachers offer a variety of personal characteristics (knowledge, skills, experience) to their employers (the school districts). In turn, school districts offer a variety of working environments, conditions of employment, and compensation programs that reflect the values that districts assign to different personal characteristics. Compensation patterns provide a means for measuring and comparing the values associated with different teacher and job characteristics both within and between school districts.¹⁴

In this chapter, responses to TDS items dealing with base salary and retirement benefits—two key components of teacher compensation—are discussed.¹⁵ Analyses that compare salaries at different times incorporate adjustments for inflation. The consumer price indices for the 1990-91 and 1993-94 school years were used for this purpose.¹⁶

¹³ Choy et al. (1993).

¹⁴ Chambers (1996).

¹⁵ The summaries of teacher salary data, as presented in this chapter, do not attempt to control for all of the wide range of factors that education economists have shown are associated with teacher compensation. These factors, such as gender, teacher qualifications, and competition in the local job market for teachers, are discussed in Chambers (1996) and Chambers and Fowler (1995).

¹⁶ Consumer Price Indices (CPI) were adjusted to a school-year (July through June) basis. The adjusted CPI for 1990-91 was 133.9; for 1993-94, 146.2. Accordingly, to make 1990-91 salaries comparable with 1993-94 salaries, the 1990-91 salaries were multiplied by (146.2/133.9 = 1.092). National Center for Education Statistics (1995).

Scheduled Salaries

Most (94 percent) of the nation's school districts had salary schedules for their teachers in 1990-91 and 1993-94. In these districts, comparisons of teacher salaries with equivalent education and experience (i.e., bachelor's degree without experience, master's degree without experience, and master's degree with 20 years experience) were possible. To enable comparisons of changes over time, 1990-91 salaries were adjusted for inflation.

Table 5.1—Average scheduled salaries for teachers (in constant 1993-94 dollars) by education and teaching experience in districts with salary schedules, by selected district characteristics: 1990-91 and 1993-94

District Characteristic	1990-91 ^a			1993-94		
	Bachelor's without experience	Master's without experience	Master's with 20 yrs. experience	Bachelor's without experience	Master's without experience	Master's with 20 yrs. experience
TOTAL	\$21,742	\$23,691	\$36,249	\$21,923	\$23,956	\$37,213
District Size						
Under 1,000	\$20,747	\$22,546	\$33,364	\$20,817	\$22,777	\$34,360
1,000 to 9,999	\$22,714	\$24,802	\$39,185	\$22,940	\$25,042	\$39,934
10,000 or more	\$23,834	\$26,163	\$41,194	\$23,212	\$25,327	\$39,657
Minority Students^b						
Under 10%	\$21,231	\$23,177	\$35,461	\$21,498	\$23,597	\$36,655
10% to under 50%	\$22,522	\$24,485	\$37,754	\$22,445	\$24,361	\$38,246
50% or more	\$22,935	\$24,877	\$37,419	\$22,784	\$24,784	\$37,378
Minority Teachers						
None	\$20,829	\$22,662	\$34,226	\$20,875	\$22,882	\$35,043
More than 0% to under 20%	\$22,714	\$24,793	\$38,717	\$22,979	\$25,090	\$39,810
20% or more	\$22,139	\$24,097	\$35,412	\$21,827	\$23,533	\$34,394
Metro Status						
Urban-inside central city	\$23,867	\$25,521	\$40,827	\$23,476	\$25,328	\$39,857
Urban-outside central city	\$23,446	\$25,549	\$40,927	\$23,781	\$26,060	\$42,680
Nonurban area	\$20,384	\$22,250	\$32,624	\$20,389	\$22,247	\$32,839
Region						
Northeast	\$24,604	\$26,617	\$43,453	\$25,581	\$27,727	\$46,594
Midwest	\$20,478	\$22,490	\$34,287	\$20,879	\$23,013	\$35,718
South	\$20,639	\$22,006	\$31,556	\$20,407	\$21,714	\$30,955
West	\$22,458	\$24,895	\$38,006	\$21,913	\$24,505	\$37,800

(a) Adjusted using the Consumer Price Index.

(b) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire).

The average scheduled salary, adjusted for inflation, for teachers with a master's degree and 20 years experience was greater in 1993-94 (\$37,213) than it was in 1990-91 (\$36,249) (table 5.1 and appendix A, table 27). Similarly, scheduled salaries for a teacher with a

master's degree and no experience, after adjusting for inflation, were greater in 1993-94 (\$23,956) than in 1990-91 (\$23,691). Scheduled salaries for a teacher with a bachelor's degree and no experience, after adjusting for inflation, were comparable in 1993-94 (\$21,923) and in 1990-91 (\$21,742).

Teachers with Bachelor's Degrees

After adjusting for inflation, scheduled salaries for inexperienced teachers with a bachelor's degree were greater in school districts in the Northeast and Midwest in 1993-94 than they were in 1990-91. In districts in the Northeast, these 1993-94 and 1990-91 scheduled salaries were \$25,581 and \$24,604, respectively; in districts in the Midwest, the scheduled salaries were \$20,879 and \$20,478, respectively. Conversely, in school districts in the South, inflation-adjusted salaries for teachers with a bachelor's degree and no experience were lower in 1993-94 (\$20,407) than they were in 1990-91 (\$20,639).¹⁷

The salaries for teachers with a bachelor's degree and no experience in 1993-94 were highest for teachers in the Northeast (\$25,581). Salaries for teachers with these qualifications in the West (\$21,913) were higher than those for comparable teachers in the Midwest (\$20,879), which were greater than those in the South (\$20,407).

In districts with fewer than 1,000 students, scheduled salaries for inexperienced teachers with a bachelor's degree were lower than in districts serving between 1,000 and 9,999 students (\$20,817 versus \$22,940). The 1993-94 scheduled salaries for these teachers were highest (\$23,212) in districts serving 10,000 or more students. Salaries for inexperienced teachers with bachelor's degrees were also lower in nonurban districts (\$20,389) than in urban areas (\$23,476 in districts in urban areas inside central cities; \$23,781 in districts in urban areas outside central cities).

These salaries were lower in districts in which the student minority composition was less than 10 percent than in districts in which the student minority composition exceeded 10 percent (\$21,498) in contrast to \$22,445 in districts with student minority compositions ranging from 10 percent to under 50 percent and \$22,784 in districts whose student minority composition was at least 50 percent. The scheduled salaries for inexperienced teachers with bachelor's degrees were lowest in districts that did not employ any minority teachers (\$20,875), intermediate in districts where minorities comprised at least 20 percent of the teaching staff (\$21,827), and highest in districts with some but fewer than 20 percent minority teachers (\$22,979) (table 5.1 and appendix A, table 27).

Teachers with Master's Degrees

The pattern of regional variation that characterized inexperience teachers with bachelor's degrees was similar to the pattern of regional variation for salaries of teachers with a master's degree without any experience and for teachers with a master's degree and 20 years of experience. After adjusting for inflation, scheduled salaries for a teacher with a master's

¹⁷ Although adjusted scheduled salaries for new teachers with a bachelor's degree in schools in the West appeared to be lower in 1993-94 (\$21,913) than in 1990-91 (\$22,458), these apparent differences were not statistically significant. This is because of the greater range of scheduled salary variations among schools districts in the West than among districts in other regions.

degree and no experience were greater in school districts in the Northeast and Midwest in 1993-94 than they were in 1990-91 (table 5.1). In districts in the Northeast, these 1993-94 and 1990-91 scheduled salaries were \$27,727 and \$26,617, respectively; in districts in the Midwest, the scheduled salaries were \$23,013 and \$22,490, respectively. Conversely, in school districts in the South, after adjusting for inflation, scheduled salaries for teachers with a master's degree and no experience were lower in 1993-94 (\$21,714) than they were in 1990-91 (\$22,006). Inflation-adjusted salaries for teachers in school districts in the West who had a master's degree and no experience were about the same in 1993-94 (\$24,505) and in 1990-91 (\$24,895). Likewise, adjusted scheduled salaries for teachers with a master's degree and 20 years of experience were higher in 1993-94 than in 1990-91 for districts in the Northeast (\$46,594 versus \$43,453) and in the Midwest (\$35,718 versus \$34,287). These salaries were lower in 1993-94 than in 1990-91 for comparable teachers in the South (\$30,955 vs. \$31,556), and about the same for teachers with a master's degree and 20 years experience in the West (\$37,800 versus \$38,006).

In 1993-94, scheduled salaries for teachers with a master's degree and no experience were higher in the Northeast (\$27,727) than in any other region. Salaries in the West (\$24,505) were greater than those in the Midwest (\$23,013), which were greater than those in the South (\$21,714). Likewise, after adjusting for inflation, scheduled salaries for a teacher with a master's degree and 20 years of teaching experience were greater in school districts in the Northeast (\$46,594) in 1993-94 than they were in any other region. The salaries for these teachers in the West (\$37,800) were greater than those in the Midwest (\$35,718), which were greater than those in the South (\$30,955).

In districts with fewer than 1,000 students, scheduled salaries for inexperienced teachers with a master's degree were lower than in districts serving between 1,000 and 9,999 students (\$22,777 versus \$25,042). The 1993-94 scheduled salaries for these teachers were higher (\$25,327) in districts serving 10,000 or more students. Similarly, in 1993-94, scheduled salaries for teachers with a master's degree and 20 years of teaching experience were lowest in districts with fewer than 1,000 students (\$34,360). However, scheduled salaries for these teachers were comparable in districts serving between 1,000 and 9,999 students (\$39,934) and in larger districts (\$39,657).

Scheduled salaries for teachers with master's degrees and no experience (\$22,247) and with 20 years of teaching experience (\$32,839) were lower in nonurban districts than in urban districts. These salaries were intermediate in districts in urban areas inside central cities (\$25,328: no experience, \$39,857: 20 years experience) and highest in urban areas outside central cities (\$26,060: no experience, \$42,680: 20 years experience).

Salaries for inexperienced teachers with master's degrees in 1993-94 were lower in districts in which the student minority composition was less than 10 percent than in districts in which the student minority composition exceeded 10 percent (\$23,597 in contrast to \$24,361 in districts with student minority compositions ranging from 10 percent to under 50 percent and \$24,784 in districts whose student minority composition was at least 50 percent). Salaries for teachers with master's degrees and 20 years of teaching experience were lower in districts in which fewer than 10 percent of the students were minorities (\$36,655) than they were in districts in which minority students comprised from 10 percent up to 50 percent of the enrollment (\$38,246). Salaries for these experienced teachers with master's degrees in districts with students minority compositions of 50 percent or more (\$37,378) were comparable with salaries in districts with other student minority compositions.

Scheduled salaries for inexperienced teachers with master's degrees were lowest in districts that did not employ any minority teachers (\$22,882), intermediate in districts where minorities comprised at least 20 percent of the teaching staff (\$23,533), and highest in districts with some but fewer than 20 percent minority teachers (\$25,090). For teachers with master's degrees and 20 years of experience, scheduled salaries were higher in districts with some but fewer than 20 percent minority teachers (\$39,810) than in either districts with no minority teachers (\$35,043) or in districts whose teaching staff was at least 20 percent minority (\$34,394) (table 5.1 and appendix A, table 27).

Collective Bargaining

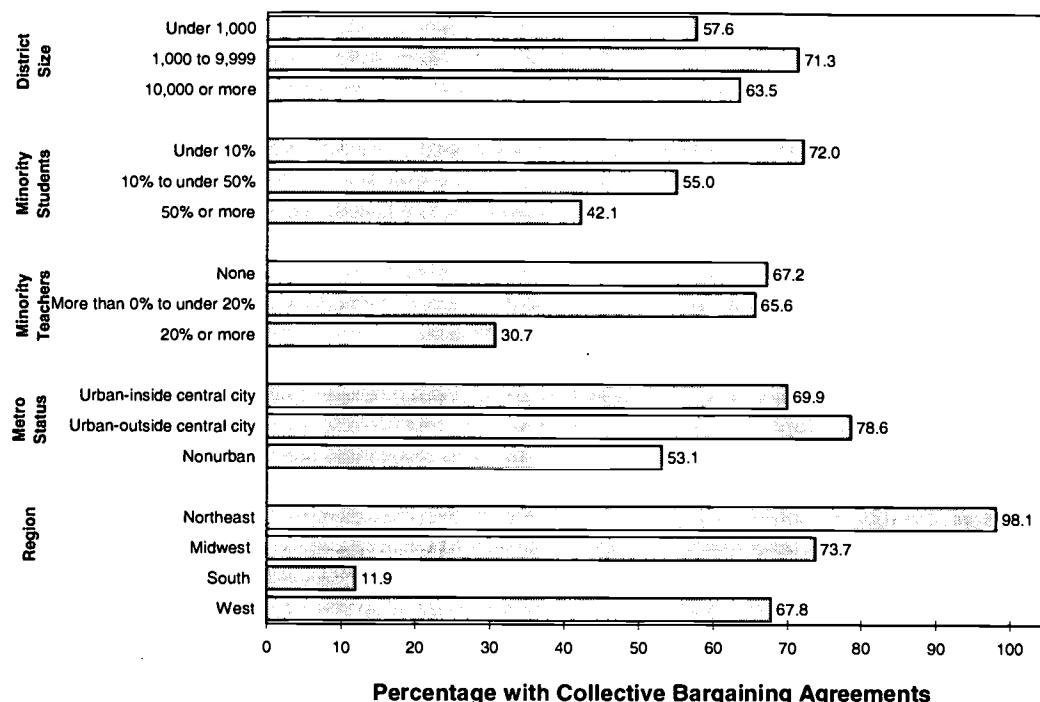
Teachers' unions or other teachers' organizations typically represent their constituencies in salary negotiations with school districts. In 1993-94, most districts (71 percent) had an agreement with a teachers' union or organization for the purpose of bargaining. About two-thirds (64 percent) of the nation's school districts had collective bargaining agreements (appendix A, table 28); 7 percent had meet-and-confer agreements. Teachers' scheduled salaries in districts with and without collective bargaining agreements were compared.¹⁸

There were large regional differences in the proportions of school districts with collective bargaining agreements (figure 5.1). Nearly all of the school districts in the Northeast (98 percent) had collective bargaining agreements—more than in any other region of the country. The proportions of districts in the Midwest (74 percent) and in the West (68 percent) with collective bargaining agreements were much higher than in the South (12 percent). In Mississippi, North Carolina, South Carolina, Texas, Virginia, and West Virginia, no districts reported collective bargaining agreements for their teachers (appendix A, table 56). Conversely, 99 percent or more of the districts in Connecticut, the District of Columbia, Hawaii, Maryland, New Jersey, New York, Pennsylvania, Rhode Island, and Wisconsin had collective bargaining agreements.

Collective bargaining agreements were most prevalent in districts that had fewer than 10 percent minority students (72 percent). In contrast, 55 percent of the districts that served between 10 and 50 percent minority students and 42 percent of the districts whose student enrollment was at least 50 percent minority had collective bargaining agreements. Collective bargaining agreements also were more prevalent in districts that had either no minority teachers (67 percent) or some but fewer than 20 percent minority teachers (66 percent) than in districts with higher proportions of minority teachers (31 percent) (figure 5.1).

¹⁸ These comparisons did not control for factors that are associated with teacher compensation patterns, such as sex, ethnicity, school type, undergraduate measures, or the social and physical environments in which teachers work; findings of differences should therefore be treated as suggestive rather than probative (Chambers 1996).

Figure 5.1—Percentage of schools districts with collective bargaining agreements, by selected district characteristics: 1993-94



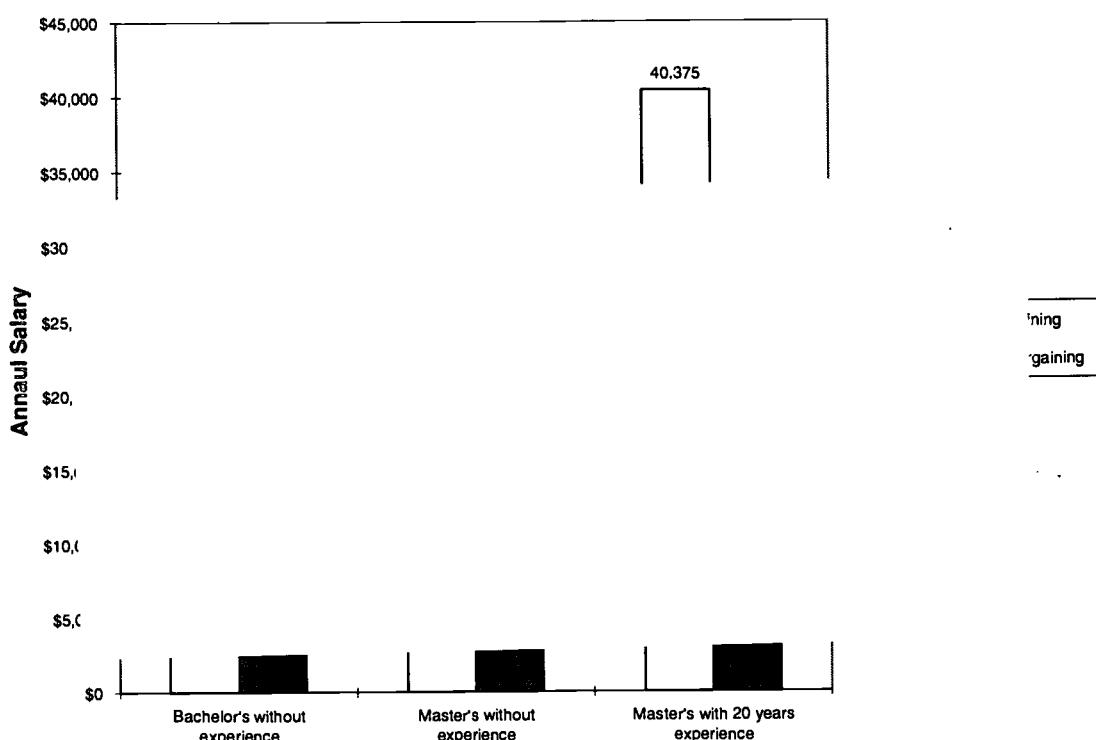
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Collective Bargaining and Scheduled Salaries

Teachers' salaries in districts with collective bargaining agreements were higher than in districts without such agreements. For a beginning teacher with a bachelor's degree, salaries were 14 percent higher (\$22,850 versus \$20,127) in districts with collective bargaining agreements; for beginning teachers with a master's degree, salaries were 16 percent higher (\$25,115 versus \$21,712); and for teachers with a master's degree and 20 years of experience, salaries were 30 percent higher (\$40,375 versus \$31,088) (figure 5.2). These associations characterized school districts regardless of their size, their proportions of minority students or teachers, or their metropolitan status (appendix A, table 29).¹⁹

¹⁹ These associations also characterized districts in the South and Midwest but not in the Northeast and West. However, possible real differences in the Northeast and West could have been obscured by the large standard errors associated with the salary estimates for these regions.

Figure 5.2—Average scheduled salary for teachers, by education and teaching experience, in districts with and without collective bargaining agreements: 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire)

Retirement Benefits

Nearly all (99 percent) of the nation's school districts offered retirement plans to their teachers in 1987-88, 1990-91, and 1993-94 (appendix A, table 30).

Impacts of Within-State Transfers on Retirement Benefits

These retirement plans typically provided few barriers to the movement of teachers between districts within a state in that nearly all allowed teachers who moved to a job in another district in the state to receive either full credit (96 percent) or partial credit (2 percent) in the retirement system for their years of teaching experience (appendix A, table 31).

However, 9 percent of the districts allowing credit for teachers transferring within the state required teachers to purchase this credit (appendix A, table 32).

In 1993-94, districts in the Midwest were less likely than those in the Northeast or South to permit teachers to receive full tenure credit in their retirement system when they moved to another district within the state (appendix A, table 31). About 94 percent of districts in the Midwest provided this incentive, in contrast to 96 percent of districts in the West, 98 percent in the Northeast, and 99 percent in the South.

Impacts of Between-State Transfers on Retirement Benefits

Districts were less lenient in their retirement credit policies for teachers coming from other states. Only 43 percent of districts permitted teachers moving from other states to receive full credit for their years of teaching experience; another 23 percent permitted partial credit (appendix A, table 31). Most (81 percent) of these districts required teachers to purchase this credit (appendix A, table 32).

Districts in the West were less likely than those in other regions to permit teachers from other states to receive full experience credit for their years of teaching in the district's retirement system (appendix A, table 31). About 22 percent of districts in the West provided this incentive, in contrast to 54 percent of districts in the Northeast, 53 percent in the South, and 41 percent in the Midwest.

Districts in urban areas outside central cities (83 percent) and nonurban districts (79 percent) were less likely to permit teachers from other states to purchase retirement credits than districts in urban areas inside central cities (91 percent) (appendix A, table 32).

Chapter 6

School District Programs and Policies

Overview

School districts that grant high school diplomas invariably specify requirements for earning these diplomas. School districts also establish programs and implement policies in a variety of other areas (such as student test reporting policies, choice programs, and written policies about student discipline and alcohol, drug, and tobacco use). They may also participate in federally sponsored programs, such as the National School Lunch program and the Chapter 1 program, and may offer programs for prekindergarten students. The prevalence and distribution of these programs and policies are discussed in this chapter.

Graduation Requirements: Background

In 1993-94, about three-quarters (76 percent) of the school districts in the country granted regular high school diplomas. These districts comprised almost all (99 percent) of the districts serving twelfth grade students. Nearly all (99.98 percent) of these diploma-granting districts required that students in the class of 1994 receive a specified amount of instruction in either English, mathematics, computer science, social science, physical or biological science, or a foreign language. In nearly all (99 percent) of these districts, these requirements reflected a 4-year program.

The publication of *A Nation at Risk* in 1983 served as a stimulus for educational reform. Among the recommendations made by the National Commission on Excellence in Education, the authors of *A Nation at Risk*, was that state and local education agencies require their students to take 4 years of English and 3 years each of mathematics, social studies, and science to graduate from high school. For purposes of presentation, these subject areas are referred to as core subjects.

District policies concerning high school graduation requirements are frequently linked to state policies. The state education agency requirements typically represent minimum standards, in that districts may specify more stringent criteria.²⁰ In 1993-94, over 99 percent

²⁰ In 1993, 48 state education agencies specified high school graduation requirements. For certain subject areas, nearly all states specified graduation requirements. At least 45 states specified mathematics, social science, and physical/biological science graduation requirements; at least 44, English graduation requirements (Levine and Huberman 1995). The phrase "at least" is used because two states did not provide information about their graduation requirements.

of the Nation's school districts had graduation requirements for each of the core subjects (table 6.1).

Table 6.1—Proportions of 4-year high school diploma-granting districts with graduation requirements, by subject areas: 1993-94

Subject Areas					
English	Mathematics	Social Studies	Physical/Biological Sciences	Computer Science	Foreign Language
99.8%	99.7%	99.5%	99.2%	36.5%	17.6%

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

For noncore subjects such as computer science and foreign language, both state and local education agencies typically did not specify graduation requirements²¹. In 1993-94, only 37 percent of 4-year high school diploma-granting districts had graduation requirements in computer science; only 18 percent, in foreign language (table 6.1). The prevalence of district high school graduation requirements (in districts that offer regular diplomas and 4-year high school programs) in both core and noncore subject areas and how they have changed from 1990-91 to 1993-94 are discussed below. Associations between district characteristics and different graduation requirements are also reviewed.

Some districts also specify community service graduation requirements. The prevalence of districts with this requirement in 1993-94 and the characteristics of districts more likely to have this requirement are also summarized.

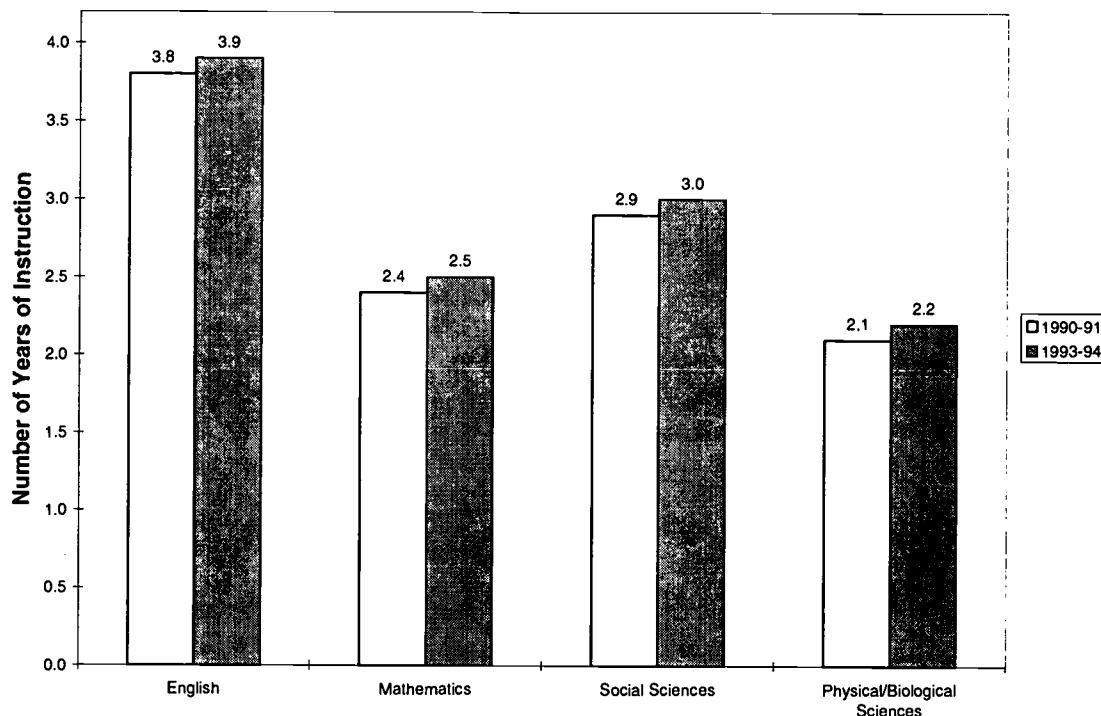
District Graduation Requirements in Core Subject Areas

In comparison with 1990-91, district graduation requirements in core subject areas in 1993-94 were more stringent. The numbers of years of instruction required in English increased from 3.8 to 3.9; in mathematics, from 2.4 to 2.5; in social sciences, from 2.9 to 3.0; and in physical/biological sciences, from 2.1 to 2.2 (figure 6.1). The combined graduation requirements in English, mathematics, social sciences, physical/biological sciences, computer science, and foreign language also increased, from 11.8 to 12.1 (appendix A, table 33).

Graduation requirements have been strongly associated with the region (and state) in which a district is located (table 6.2 and appendix A, tables 33-37). By 1993-94, most (85 percent) diploma-granting districts in the country required 4 years of high school English for graduation. On average, the typical districts in the Northeast and South required 4.0 years of English; the typical district in the West, 3.9 years. However, the graduation requirements in English for districts in the Midwest were only 3.7 years.

²¹ In 1993, only four states specified computer education graduation requirements, and only three states specified foreign language requirements (Levine and Huberman 1995).

Figure 6.1—Average high school graduation requirements (in years) in core subjects in diploma-granting districts with 4-year programs: 1990-91 and 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table 6.2—District high school graduation requirements, by region: 1993-94

	Region			
	Midwest	Northeast	South	West
English (in years)	3.7	4.0	4.0	3.9
Mathematics (in years)	2.3	2.7	2.8	2.3
Social Science (in years)	2.8	3.3	2.8	3.1
Physical/Biological Science (years)	2.0	2.3	2.4	2.1
Computer Science (% requiring)	37%	32%	39%	36%
Foreign Language (% requiring)	6%	29%	22%	24%
Community Service (% requiring)	3%	6%	2%	4%

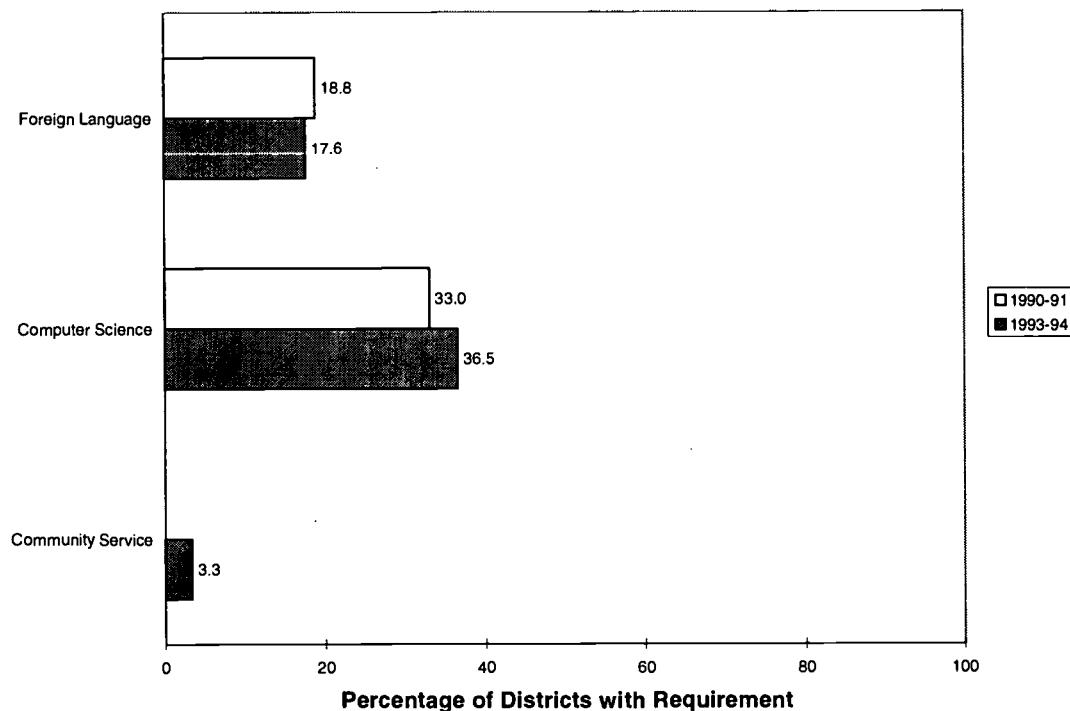
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Districts in the Midwest also had the least stringent graduation requirements in physical/biological sciences (2.0 years) lower, on average, than districts in any other region (whose requirements ranged from 2.1 to 2.4 years). Their graduation requirements in mathematics (2.3 years) were lower than districts in the South (2.8 years) and Northeast (2.7 years) and comparable with those in the West (2.3 years). Similarly, graduation requirements in the Midwest in social science (2.8 years) were lower than districts in the Northeast (3.3 years) and West (3.1 years), and were comparable with those in the South (2.8 years).

District Graduation Requirements in Other (Noncore) Areas

In the 1993-94 school year, about one-sixth (18 percent) of the nation's public school districts had a foreign language high school graduation requirement; about one-third (36 percent), a computer science requirement (figure 6.2). About 3 percent of the school districts also specified a community service requirement for high school graduation.

Figure 6.2—Percentage of 4-year high school diploma-granting districts with graduation requirements in noncore subject areas: 1990-91 and 1993-94



NOTE: Community Service graduation requirements were not assessed in 1990-91.

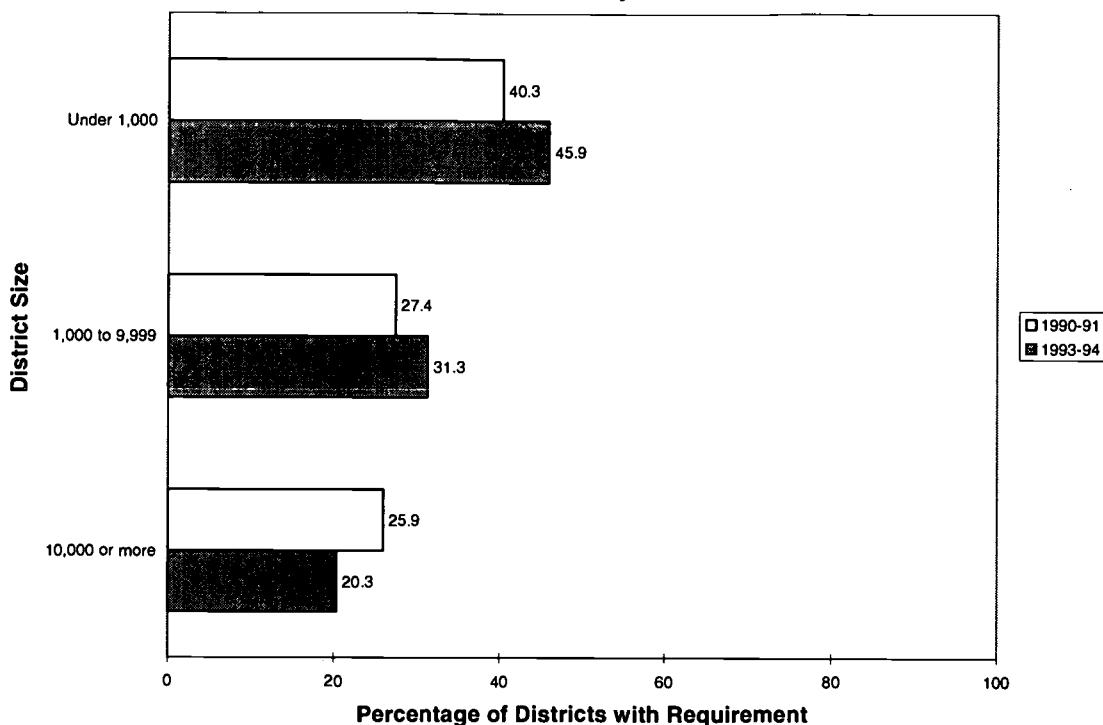
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire).

Computer Science Graduation Requirements

The proportions of districts in the Midwest with high school graduation requirements in computer science were similar to those of districts in other regions. In 1993-94, the proportion of districts with computer science graduation requirements in the country's different regions ranged from 31 to 39 percent, with districts in the Midwest at the upper end of the range (37 percent) (appendix A, table 38).

Proportionately more districts had computer science graduation requirements in 1993-94 (37 percent) than in 1990-91 (33 percent). However, this trend did not characterize all types of districts. In contrast to 1990-91, the proportion of large school districts (i.e., with 10,000 or more students) in 1993-94 with high school graduation requirements in computer science was lower than in 1990-91 (26 percent versus 20 percent) (figure 6.3).

Figure 6.3—Percentage of 4-year high school diploma-granting districts with graduation requirements in computer science, by district size: 1990-91 and 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire).

The decline in the proportion of school districts with computer science graduation requirements was most pronounced in school districts in the South in urban areas inside central cities (appendix A, table 38). In 1993-94, the proportion of these districts with computer science graduation requirements (21 percent) was about half the proportion in 1990-91 (40 percent). Some of these central city districts in the South dropped their computer science requirements since they wished to have the same requirements as their state education agency. In other words, since their state did not have an explicit computer science graduation requirement, they decided not to require computer science instruction for graduation. Other districts which dropped computer science graduation requirements indicated that computer technology was so well-integrated with other course work that a separate requirement was no longer felt to be necessary.

By 1993-94, more than twice as many small districts (46 percent) required their students to earn computer science credits to graduate than did large districts (20 percent) (figure 6.3). Analogously, in 1993-94, the proportion of nonurban districts with computer science graduation requirements (41 percent) was about 50 percent higher than the proportion of districts in urban areas inside central cities (28 percent) (table 6.3 and appendix A, table 38).

Table 6.3—Percentage of districts with high school graduation requirements in computer science, by metropolitan status: 1990-91 to 1993-94

	School Year	
	1990-91 % Districts	1993-94 % Districts
TOTAL	33.0	36.5
Metro Status		
Urban-inside central city	30.5	28.1
Urban-outside central city	27.5	30.2
Nonurban area	36.4	41.3

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaires).

Foreign Language Graduation Requirements

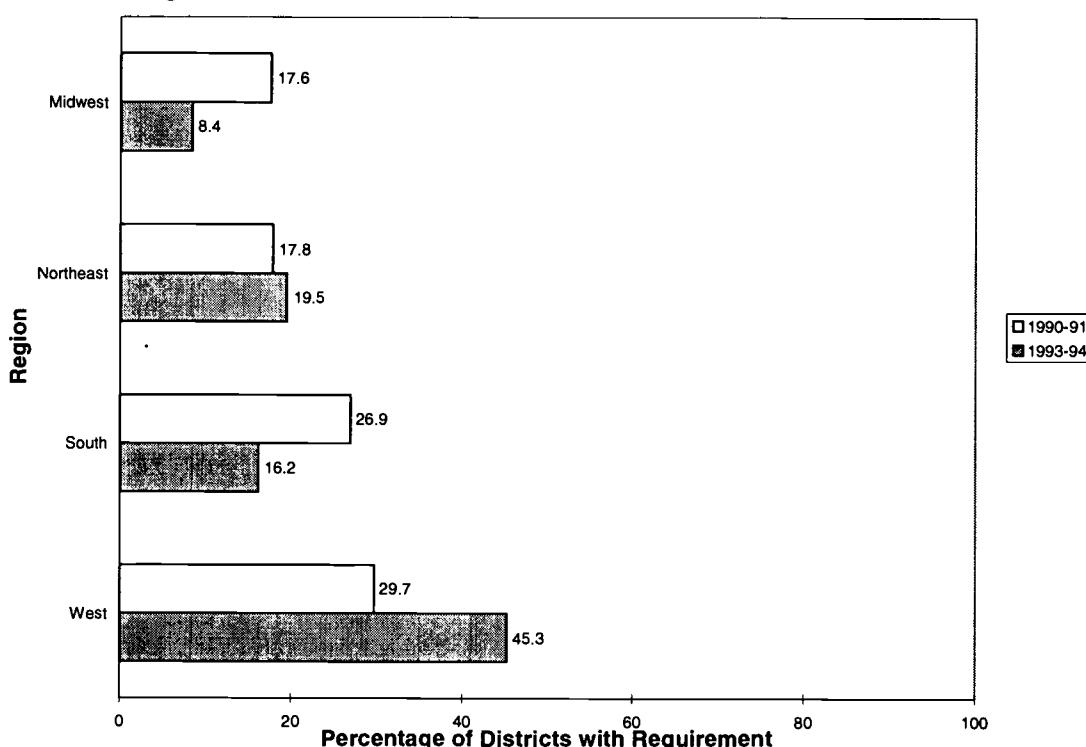
The overall proportion of districts with graduation requirements in a foreign language was approximately the same in both 1993-94 (18 percent) and 1990-91 (19 percent) (figure 6.2). However, in 1993-94, fewer school districts with fewer than 10 percent minority students had a foreign language graduation requirement (13 percent) than in 1990-91 (17 percent) (appendix A, table 39).

In 1993-94, very few districts in the Midwest (only 6 percent) had foreign language high school graduation requirements (table 6.2). The proportion of districts in the Midwest with this requirement was much less than in any other region: less than one-third the proportions in the South (22 percent), West (24 percent), or Northeast (29 percent). Furthermore, in the Midwest, the proportion of districts with this requirement was significantly lower than it was in 1990-91 (10 percent) (appendix A, table 39). In other regions, the proportions of districts with foreign language graduation requirements were about the same in both 1990-91 and 1993-94.

Although about one-sixth of the nation's school districts had a foreign language high school graduation requirement in 1993-94, almost half (45 percent) of districts in urban areas inside central cities in the West had a foreign language graduation requirement (figure 6.4). This percentage is more than double the proportions in other districts in urban areas inside central cities, and more than five times the proportion characterizing central city school districts in the Midwest. The proportion of central cities in the West with foreign language graduation requirements was significantly higher than it was in 1990-91, when it was only 30 percent.

Districts with larger proportions of minority enrollment were more likely to have a foreign language requirement than districts with smaller proportions. In 1993-94, the proportion of predominantly minority districts with a foreign language graduation requirement (29 percent) was higher than the proportion in districts with moderate (10 percent to less than 50 percent) proportions of minority students (22 percent) (appendix A, table 39). It was also more than double the proportion of districts that had fewer than 10 percent minority students (13 percent).

Figure 6.4—Percentage of urban-inside central city, 4-year high school diploma-granting districts with foreign language graduation requirements, by region: 1990-91 and 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire)

National Programs: Background

The federal government allocated \$67.7 billion in fiscal year (FY) 1993 for education programs. The largest proportion of these funds (\$30.5 billion, or 45 percent) were allocated by the U.S. Department of Education. Substantial amounts (in excess of \$1 billion) were also allocated by the Departments of Health and Human Services (\$10.9 billion), Agriculture (\$8.1 billion), Labor (\$4.2 billion), Defense (\$4.0 billion), Energy (\$2.8 billion), and Veterans Affairs (\$1.1 billion). The National Science Foundation allocated \$2.1 billion; the National Aeronautics and Space Administration, \$1.4 billion (U.S. Department of Education 1994).

These funds enabled school districts to offer many different programs designed to benefit poorer students or younger (i.e., prekindergarten) children. Some of the largest of these programs were the National School Lunch program, Chapter 1 programs for disadvantaged students, and a variety of prekindergarten programs (supported through Head Start, Chapter 1, and other sources).

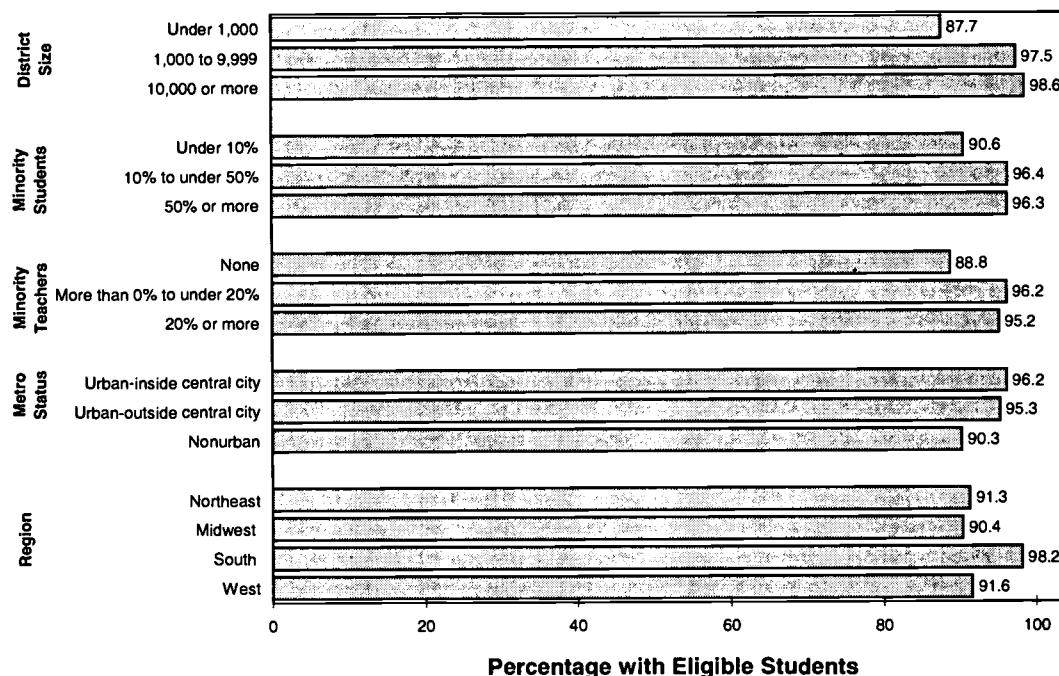
National School Lunch Program

The National School Lunch program began in 1946 with the passage of Public Law 79-396, the National School Lunch Act. Through this law, Department of Agriculture funds were

provided to states to help support their school lunch programs. In 1993-94, \$4.1 billion was allocated for this program. Eligibility for participation is based on economic criteria. For this reason, in many different research studies, the proportion of students eligible for participation in this program has been used as an indicator of district poverty.

In 1993-94, 93 percent of the school districts in the country reported they had at least one student eligible for participation in the National School Lunch program (figure 6.5). Nearly all (98 percent) of the districts with eligible students reported that some students in their district received free or reduced-price lunches through the program. About 41 percent of the public school students (kindergarten or higher grades) in the nation were approved for participation in this program, and 31 percent actually received free or reduced-price lunches in 1993-94 (appendix A, table 43).²²

Figure 6.5—Percentage of school districts with students eligible for participation in the National School Lunch program, by selected district characteristics: 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

In 1993-94, there were students eligible for participation in nearly all (98 percent) districts in the South (figure 6.5). Proportionally more districts in the South had students eligible for participation than any other region.

²² Percentages were calculated by dividing the numbers of eligible students (17,224,542) and students receiving free and reduced price lunches (13,073,607) in 1993-94 by the total number of students (42,302,143) (appendix A, table 10).

Districts with at least one student eligible for participation in the National School Lunch program were more likely to have larger enrollments (i.e., 99 percent of the districts with enrollments over 10,000 students and 98 percent of the districts with enrollments between 1,000 and 9,999 students) than districts serving fewer than 1,000 students (88 percent). From a common sense perspective, the larger the district, the more likely it will have at least one student eligible for participation. So, the relationships between other direct characteristics and the proportions of districts with eligible students may reflect relationships with enrollment size. For example, proportionally more urban districts (districts in urban areas inside central cities: 96 percent; districts in urban areas outside central cities: 95 percent) than nonurban districts (90 percent) reported having eligible students.

In addition, districts with higher proportions of minority students (10 percent or more) and districts with minority teachers were more likely to have eligible students than districts with less than 10 percent minority student enrollments and districts with no minority teachers. There was at least one eligible student in 96 percent of the districts where minority students comprised at least 10 percent of the population. Of the districts with less than 10 percent minority students, 91 percent reported students eligible for participation. Analogously, 95 to 96 percent of the districts with minority teachers reported at least one eligible student. In districts with no minority teachers, 89 percent reported students eligible for the National School Lunch program.

Chapter 1 Programs

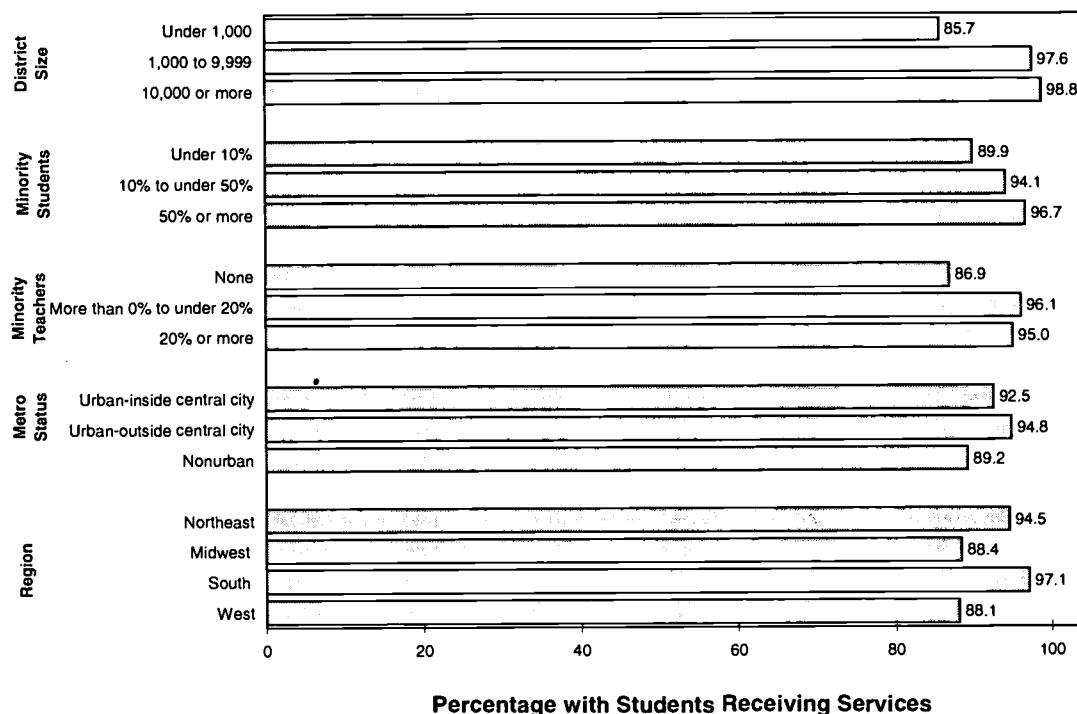
In 1965, the Elementary and Secondary Education Act (Public Law 89-10) authorized grants for school programs for children of low-income families through the Title 1 program. The Education Consolidation and Improvement Act of 1981 (Public Law 97-35) consolidated 42 federally supported programs into 7, and reauthorized the Title 1 program as the Chapter 1 program. The Augustus F. Hawkins—Robert T. Stafford Elementary and Secondary School Improvement Amendments of 1988 (Public Law 100-297) reauthorized this program. More recently, through the Improving America's Schools Act (Public Law 103-382), Chapter 1 was reauthorized as the Title 1 program. Chapter 1 programs are explicitly intended to break the link between poverty and low student achievement, especially in areas characterized by high concentrations of poverty (U.S. Department of Education 1994, p. 356). These programs provide educational services, such as remedial math and reading, to children in areas with high concentrations of low-income families. In FY 1993-94, a total of \$6.8 billion was allocated through Chapter 1 programs.

Chapter 1, like the National School Lunch program, is a program that benefits nearly all of the nation's school districts. About 92 percent of districts provided students with Chapter 1 services in 1993-94, serving 5,954,190 students (appendix A, table 41). In 1993-94, Chapter 1 services were provided in proportionally more school districts in the South (97 percent than in the Midwest or West (88 percent) (figure 6.6). The proportion of districts providing Chapter 1 services in the Northeast (95 percent) was comparable to the proportion of districts in the South.

Since Chapter 1 is intended to serve children in high-poverty areas, it is not surprising that the types of districts most likely to provide Chapter 1 services were generally those most likely to serve children eligible for participation in the National School Lunch program. Like the National School Lunch program, proportionally more of the districts with student

enrollments greater than 1,000 (98 to 99 percent) had children receiving Chapter 1 services than districts with enrollments of fewer than 1,000 students (86 percent). And, like the National School Lunch program, proportionally more central city districts (95 percent) than nonurban districts (89 percent) received these services.

Figure 6.6—Percentage of school districts with students receiving Chapter 1 services, by selected district characteristics: 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Similarly, greater proportions of districts that served predominantly minority students and districts with the highest concentrations of minority teachers reported that their students received Chapter 1 services than did districts with fewer than 10 percent minority students and districts with no minority teachers. About 97 percent of the districts in which minority students made up at least half the student population reported that at least some of their students received Chapter 1 services. In 94 percent of the districts where the student minority composition ranged from 10 percent minority to less than 50 percent students received Chapter 1 services, and in districts with fewer than 10 percent minority students, 90 percent reported that at least one of their students received Chapter 1 services. In districts with minority teachers, 95 to 96 percent reported students receiving these services; 87 percent of the districts without minority teachers had students receiving Chapter 1 services.

Prekindergarten Programs

In 1993-94, 64 percent of the nation's school districts offered programs during the school day for prekindergarten children (table 6.4). Some of these programs (like Chapter 1 prekindergarten programs and the Head Start program), but not all, were funded by the federal government.

Table 6.4—Percentage of school districts with various types of programs for prekindergarten-age children, by selected district characteristics: 1993-94

District Characteristic	Type of Prekindergarten Programs					At least one type of Prekindergarten Program
	Head Start	Chapter 1	Day Care	Special Education	General	
TOTAL^a	24.3	8.4	14.5	44.9	25.1	64.1
District Size						
Under 1,000	15.9	4.4	8.4	31.3	20.8	51.4
1,000 to 9,999	31.8	10.8	18.9	57.3	28.0	75.8
10,000 or more	44.8	29.7	39.3	74.2	43.8	90.9
Minority Students^b						
Under 10%	22.3	6.2	11.7	42.4	22.1	59.3
10% to under 50%	24.3	10.8	19.0	48.4	28.7	69.5
50% or more	35.7	14.6	18.5	48.9	32.5	76.8
Minority Teachers						
None	19.9	5.7	8.6	38.6	22.1	55.9
More than 0% to under 20%	26.4	9.9	19.9	50.7	26.6	70.4
20% or more	41.9	18.6	22.3	52.2	36.4	81.1
Metro Status						
Urban-inside central city	35.9	26.3	33.2	63.7	38.1	84.0
Urban-outside central city	20.3	6.4	17.5	45.5	25.1	63.5
Nonurban area	26.4	8.7	11.2	43.2	24.2	63.2
Region						
Northeast	16.3	8.1	12.5	36.5	19.5	54.1
Midwest	25.7	7.7	13.5	51.9	28.3	68.4
South	33.1	14.3	14.6	46.4	35.2	75.2
West	20.1	3.7	18.7	38.5	13.4	53.8

(a) Totals sum to more than 100 percent since districts could provide more than one program.

(b) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Larger districts were more likely to offer prekindergarten programs than smaller districts. About 91 percent of districts with enrollments of 10,000 or more students offered these programs, in contrast to about three-quarters (76 percent) of districts enrolling between 1,000 and 9,999 students and about half (51 percent) of districts enrolling fewer than 1,000 students. Districts in the South (75 percent) were more likely to offer prekindergarten programs than districts in any other region.

Districts in the Midwest (68 percent) were more likely to provide these programs than districts in the Northeast or West (54 percent).

In 1993-94, 84 percent of urban areas inside central city school districts offered prekindergarten programs in 1993-94, compared with 63 percent of other districts. Prekindergarten programs were least likely to be offered in districts with fewer than 10 percent minority students (59 percent): 70 percent of the districts with student minority compositions ranging from 10 percent to under 50 percent and 77 percent of the districts with student minority compositions of 50 percent or greater offered these programs. Prekindergarten programs were offered in 56 percent of districts with no minority teachers; 70 percent of the districts with some, but fewer than 20 percent minority teachers, and 81 percent of the districts with at least 20 percent minority teachers.

Head Start Programs

Head Start is a federally funded program that is intended to assist in the provision of developmental services for low-income, pre-school children aged 3 to 5. These programs, supported by the U.S. Department of Health and Human Services, focus on education, social and emotional development, physical and mental health, and nutrition. Head Start also provides social services for families. In FY 1993, \$2.7 billion was allocated for this program, which served 713,943 students.²³

About one-quarter (24 percent) of the school districts in the country offered Head Start programs in 1993-94 (table 6.4). Proportionally more districts in the South (33 percent) offered these programs than in other regions. In addition, the larger the district, the more likely it was to offer Head Start prekindergarten programs: Head Start programs were available in 44 percent of the districts with enrollments of 10,000 or more; available in 32 percent of the districts with enrollments between 1,000 and 9,999 students; and available in 16 percent of districts with enrollments of less than 1,000 students. About 36 percent of districts in urban areas inside central cities offered these programs for prekindergarten children—a greater prevalence than in nonurban districts (26 percent). Both of these kinds of districts were more likely to offer Head Start programs than urban areas outside central city (20 percent).

Head Start prekindergarten programs were more likely to be offered in districts in which minority students made up 50 percent or more of the student population (36 percent) than in districts in which minority students made up less than 10 percent of the student population (22 percent), and were more likely to be offered in districts where minority teachers made up 20 percent or more of the teaching staff than in districts with lower proportions of minority teachers. About one-third (36 percent) of the districts in which the proportion of minority students exceeded 50 percent offered Head Start prekindergarten programs, whereas only 22 to 24 percent of the districts with proportionately fewer minority students (from 10 percent to under 50 percent or under 10 percent minority enrollment) had Head Start prekindergarten programs. About 42 percent of the districts in which minority teachers comprised at least 20 percent of the teaching staff offered these programs, in contrast to 26 percent of the districts with some but fewer than 20 percent minority teachers.

²³ U.S. Department of Education (1994)

Both of these proportions were larger than in districts with no minority teachers (20 percent).

Chapter 1 Prekindergarten Programs

About 8 percent of the school districts in the nation offered Chapter 1 prekindergarten programs in 1993-94 (table 6.4). Like programs funded by Head Start, proportionally more districts in the South (14 percent) provided these programs than districts in other regions. Districts in the West were least likely to offer these programs—only 4 percent provided them—compared with 8 percent of the districts in the Northeast and Midwest. Also, like Head Start programs, the larger the district, the more likely it was to offer Chapter 1 prekindergarten programs. They were most likely to be provided in districts with enrollments of 10,000 or more (30 percent); were less likely to be provided in districts with enrollments between 1,000 and 9,999 students (11 percent); and were least likely to be offered in districts with enrollments of fewer than 1,000 students (4 percent). Similar to Head Start programs, Chapter 1 programs were also more likely to be offered in districts in urban areas inside central cities (26 percent); next most likely to be provided in nonurban districts (9 percent), and least likely to be provided in districts in urban areas outside central cities (6 percent).

Chapter 1 prekindergarten programs were also offered more in districts with the highest concentrations of minority students and teachers than in districts with lower proportions of minority students and teachers. For example, about 15 percent of the districts where the proportion of minority students exceeded 50 percent offered Chapter 1 prekindergarten programs; 11 percent of the districts with minority student compositions of between 10 percent to under 50 percent and only 6 percent of the districts with fewer than 10 percent minority students provided Chapter 1 prekindergarten programs. About 19 percent of the districts with the highest concentrations of minority teachers (i.e., at least 20 percent of the teaching staff) offered these programs, in contrast to 10 percent of the districts with some but fewer than 20 percent minority teachers. The lowest proportion of districts (6 percent) in which these programs were offered were those in which there were no minority teachers.

Other Prekindergarten Programs

Day care programs, prekindergarten special education programs, and other general prekindergarten programs, either administered by the district or by an outside agency, were offered by 15 percent, 45 percent, and 25 percent, respectively, of the nation's school districts in 1993-94 (table 6.4). These programs are supported through a variety of funding sources, including federal, state, local, and private agencies.

Day care programs were as likely to be offered by school districts in the South (15 percent) as in any other region. In the Northeast, 13 percent of the districts offered day care programs; in the Midwest, 14 percent; and in the West, 19 percent. However, prekindergarten special education programs were more likely to be offered in school districts in the Midwest (52 percent) and South (46 percent) than in Northeast (37 percent) districts. They were also more prevalent in districts in the Midwest (52 percent) than in districts in the West (39 percent) districts. General prekindergarten programs were more likely to be provided in districts in the South (35 percent) than in districts in the Northeast (20 percent), or in the West (13 percent). About 28 percent of the districts in the Midwest offered general

prekindergarten programs. This level is comparable to those found in districts in the South or Northeast.

The probability of a district providing any of the other prekindergarten programs (i.e., day care, special education, or other general programs) was related to the district's size. Each of these kinds of prekindergarten programs was most likely to be provided in districts with enrollments of 10,000 or more; less likely to be provided in districts with enrollments between 1,000 and 9,999 students; and least likely to be offered in districts with enrollments of fewer than 1,000 students. Similarly, their prevalence was greater in districts in urban areas inside central cities than in either districts in urban areas outside central cities or nonurban districts.

All of these other prekindergarten programs were more likely to be in districts with the highest concentrations of minority teachers (20 percent or more) than in districts with no minority teachers.

State and Local Reforms

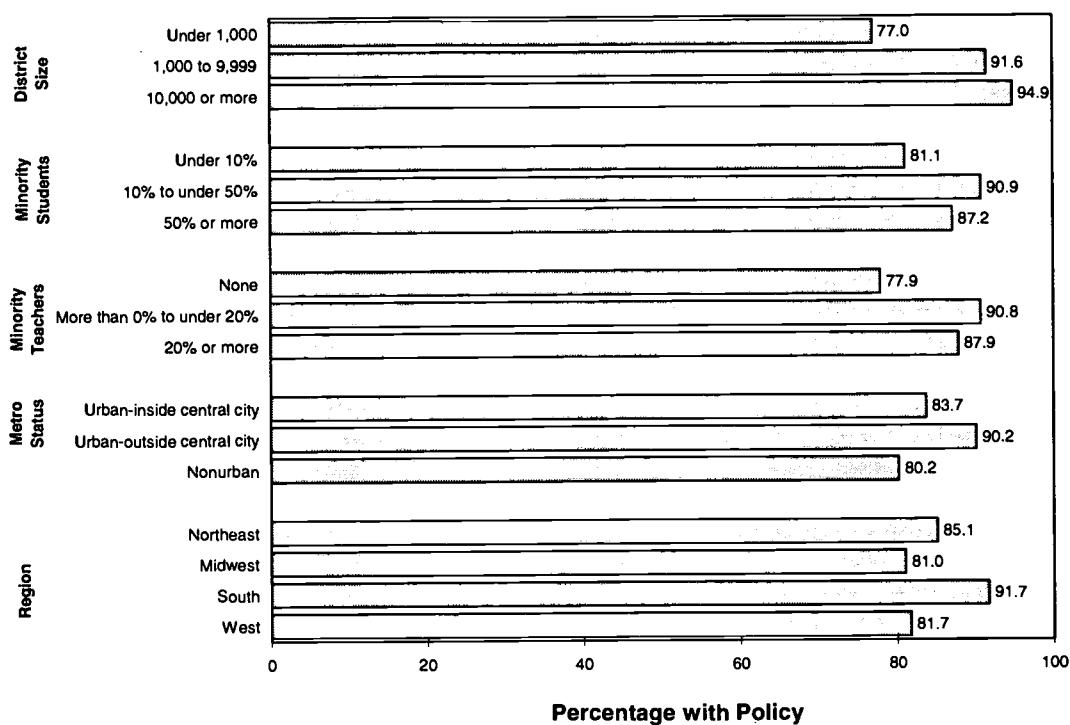
State education agencies and school districts have implemented a variety of programs and policies that are commonly referred to as education reforms. These reforms include requiring districts to release standardized student test results to the general public; instituting "choice" programs, which allow students to enroll in schools outside of their attendance zone; and establishing written policies about discipline and student use of drugs, alcohol, and tobacco.

Student Test-Performance Reporting Policies

Test-performance reporting policies prescribe the reporting and dissemination of information about student test performance on standardized tests. About five-sixths (84 percent) of the nation's school districts reported that they disseminated student test scores to the general public in 1993-94.

Test-performance reporting to the general public was more prevalent in the South, where 92 percent of the districts did so, than in the Midwest (81 percent), the West (82 percent), or the Northeast (85 percent) (figure 6.7). In spite of the fact that 17 states did not explicitly require reporting to the public, only two states had proportions of fewer than 65 percent of districts reporting results to the general public: North Dakota (38 percent) and Montana (39 percent) (appendix A, table 61).

Test-score reporting was more prevalent in the largest districts (i.e., those with enrollments of 10,000 students or more); about 95 percent of these districts disseminated test scores to the general public (figure 6.7). Of the districts that served between 1,000 and 9,999 students, 92 percent had similar dissemination practices. The rates of test-performance reporting in both of these types of districts were greater than the 77 percent rate characteristic of districts serving fewer than 1,000 students.

Figure 6.7—Percentage of districts with a student test-performance reporting policy, by selected district characteristics: 1993-94

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Districts in urban areas outside central cities were more likely to report test scores than districts in nonurban areas. About 90 percent of these urban districts reported student test performance, while 80 percent of nonurban districts reported dissemination of test-performance results to the general public. About 84 percent of districts in central cities reported test scores.

Districts whose student racial composition was between 10 percent and 50 percent minority or was at least 50 percent minority were more likely to report student test performance to the general public than districts with fewer than 10 percent minority students (91 percent and 87 percent versus 81 percent, respectively). Similarly, districts with some but fewer than 20 percent minority teachers (91 percent) or than districts with 20 percent or more minority teachers (88 percent) were more likely to report test results to the general public than districts with no minority teachers (78 percent).

Choice Programs

There are two broad classes of public school choice programs: intradistrict choice (i.e., within-district open enrollment), in which students may enroll in any school in their districts, and interdistrict choice (i.e., between-district transfers), in which students may enroll in other districts or districts can accept students from any district in the state (subject to availability and space requirements). Magnet school programs, in which schools offer distinctive curricula or instructional approaches to attract students for desegregation

purposes, can be offered independently of or integrated with a district's intradistrict or interdistrict choice programs.²⁴ In 1993-94, about one-third (34 percent) of the school districts in the country offered some kind of choice program (table 6.5).

Table 6.5—Percentage of districts with choice programs by type of choice program, by selected district characteristics: 1993-94

District Characteristic	Any Choice Program	Magnet School	Within	Interdistrict Choice	
			District Open Enrollment	Transfers Outside of District	Transfers into District
TOTAL	34.1	7.8	13.8	28.5	25.6
District Size					
Under 1,000	35.5	5.9	8.7	32.0	26.3
1,000 to 9,999	31.2	7.3	17.3	24.1	23.8
10,000 or more	47.4	33.0	36.1	32.7	34.6
Minority Students^a					
Under 10%	36.3	6.7	12.6	30.9	27.3
10% to under 50%	32.7	8.3	16.2	26.7	24.2
50% or more	27.1	12.8	14.3	20.7	20.6
Minority Teachers					
None	36.0	6.3	10.0	31.4	6.6
More than 0% to under 20%	32.6	8.6	17.6	26.2	24.8
20% or more	30.8	13.6	16.4	22.8	23.5
Metro Status					
Urban-inside central city	42.6	24.3	29.3	26.2	28.2
Urban-outside central city	27.8	7.6	15.4	22.1	19.6
Nonurban area	38.1	6.9	11.7	33.2	29.7
Region					
Northeast	13.3	4.2	5.5	9.6	8.5
Midwest	41.6	7.7	15.0	34.6	29.7
South	29.5	7.7	10.4	24.0	23.8
West	47.1	12.1	24.0	41.7	37.6

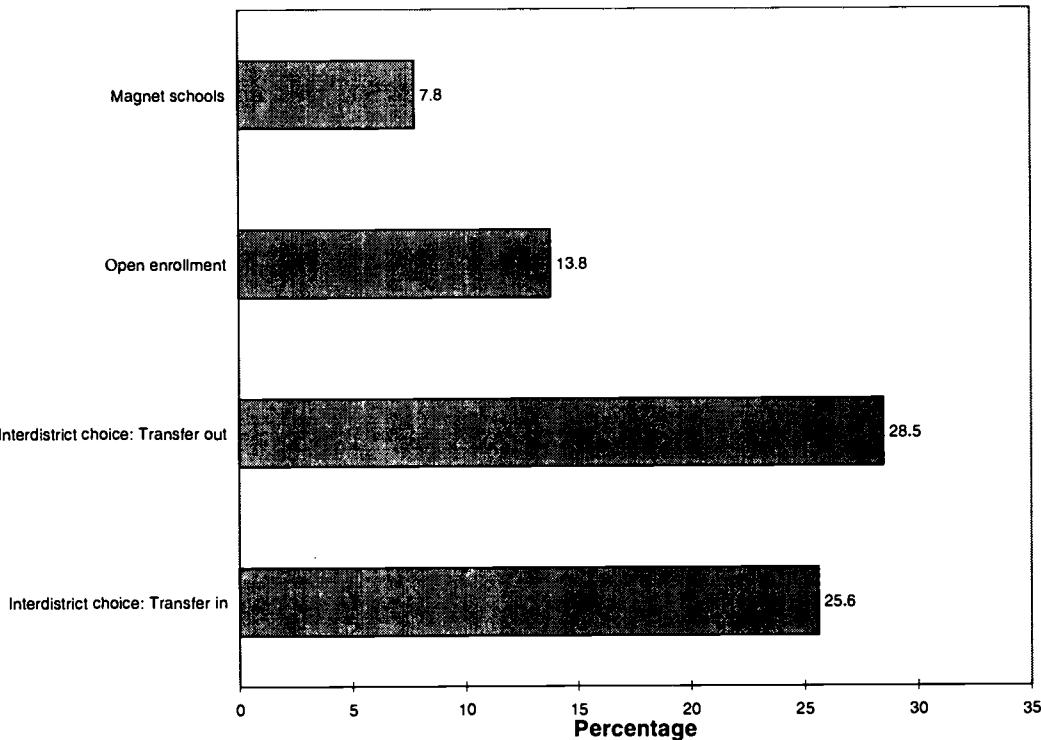
(a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

²⁴ Steel and Levine (1994).

The most prevalent kinds of choice programs (with respect to the numbers of districts offering choice programs) were interdistrict choice programs, in which districts permitted students to transfer to schools outside of their district or accepted transfers of students into their district. In 1993-94, 29 percent of the districts permitted outward transfers and 26 percent of the nation's school districts permitted students to transfer into their districts from other districts (table 6.5 and figure 6.8). The next most prevalent kind of choice programs were within-district open enrollment programs (intradistrict choice). These programs were offered by 14 percent of the county's school districts. Magnet schools, as choice programs, were offered in 8 percent of the county's school districts.²⁵

Figure 6.8—Percentage of districts with choice programs, by type of choice program: 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

The prevalence of choice program offerings is not an indicator of the numbers of students participating in these different types of programs. Many fewer students participated in interdistrict choice programs, the most prevalent program, than participated in either open

²⁵ The types of choice programs enumerated in the 1993-94 TDS were not mutually exclusive, preventing estimates of the numbers of students enrolled in each kind of program. For example, magnet schools may be an option in districts that offer open enrollment. Students enrolled in these magnet schools may be counted as participating in an open enrollment program, participating in a magnet school program, or in both categories.

It should also be noted that some educators consider any innovative or distinctive educational program to be a magnet program, whether or not it operates within the context of "choice," or tries to reduce racial imbalance.

enrollment or magnet programs.²⁶ It should also be remembered that choice programs must operate under capacity constraints. The capacity of a popular school to enroll students is limited. Even with choice programs, it is not possible for every student to enroll in his or her first choice of schools.

Within-District Open Enrollment Programs

Within-district choice programs are viable options only in districts that have two or more schools serving students at a particular grade level. In other words, if there is only an elementary school, a middle school, and a high school in a district, there is no possibility of within district choice—students must go to the only school appropriate for their grade level. If there is only a single school in a district, within-district choice is a meaningless concept. However, between-district choice is an option for these small districts.

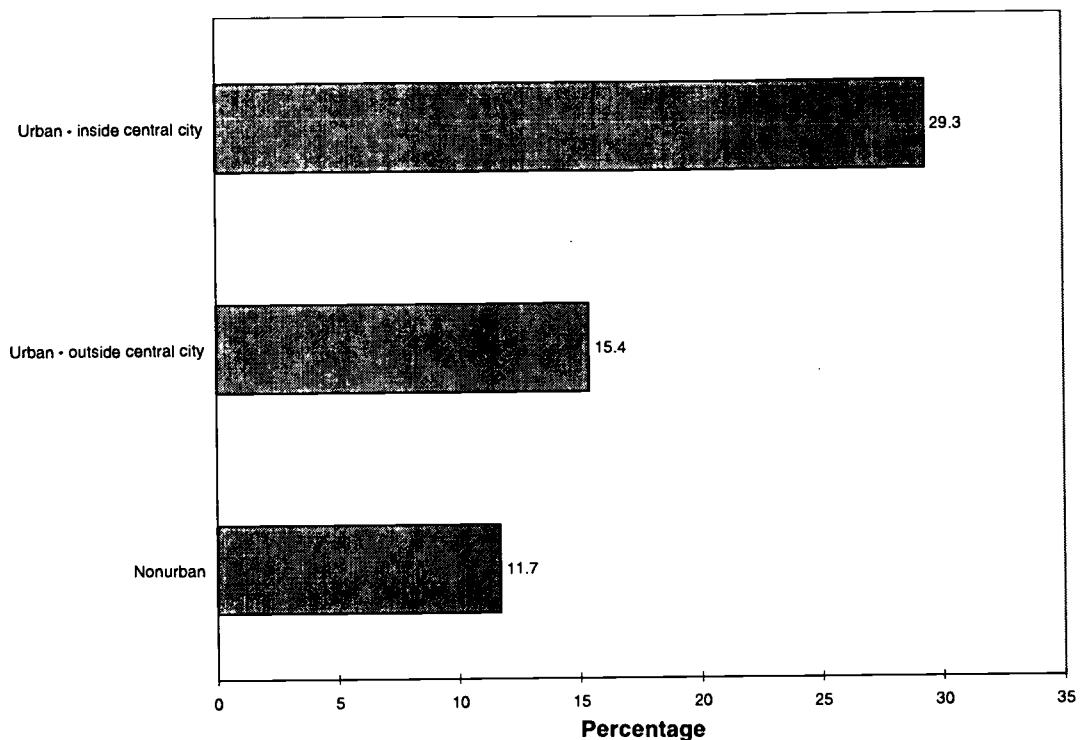
Districts with enrollments of 10,000 or more (36 percent) were much more likely to offer within-district open enrollment programs than in districts with enrollments between 1,000 and 9,999 (17 percent). Districts with fewer than 1,000 students were the least likely to offer this kind of choice program: only 9 percent of the districts offered this option (table 6.5).²⁷

These programs were also characteristic of central city school districts. The prevalence of within-district open enrollment programs was highest in the districts in urban areas inside central cities (29 percent). Their prevalence in districts in urban areas outside central cities (15 percent) was comparable to their prevalence in nonurban districts (12 percent) (figure 6.9).

²⁶ Steel and Levine (1994).

²⁷ Smaller districts may only have one school offering programs at a certain grade level. Accordingly, within-district open enrollment programs may not be possible in many small districts. This may explain why the prevalence and participation rates in within-district open enrollment programs are lowest in the smallest districts.

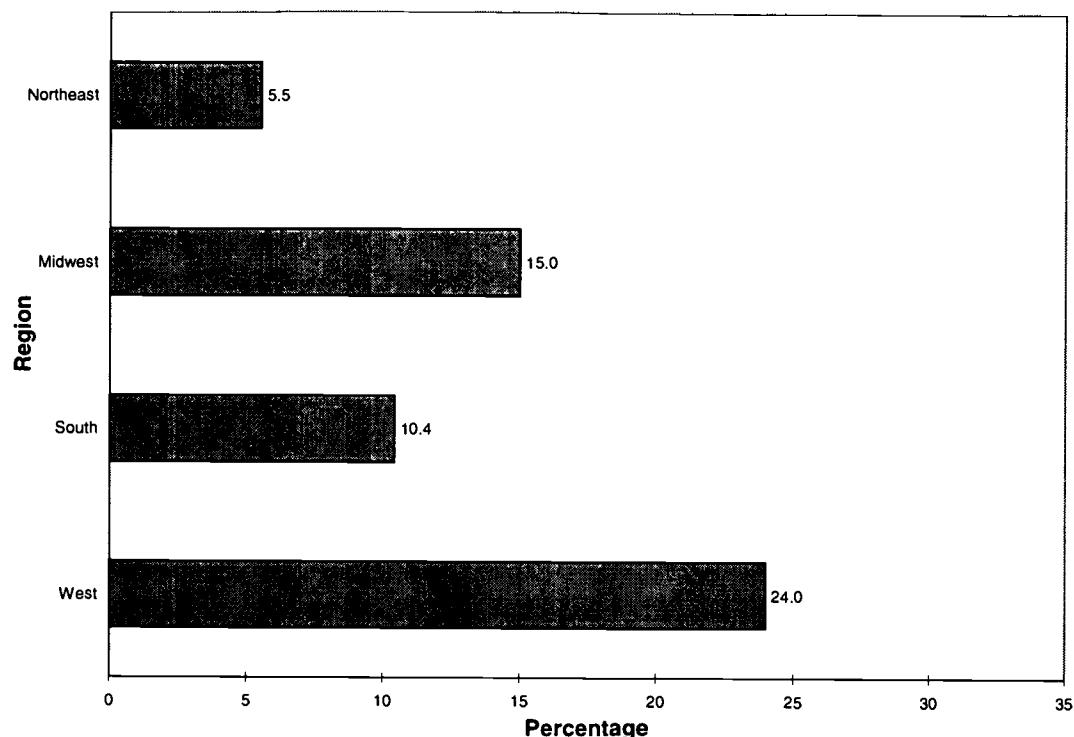
Figure 6.9—Percentage of districts with within-district open enrollment programs, by metropolitan status: 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Proportionally fewer school districts in the Northeast (6 percent) offered these kinds of programs in 1993-94 than districts in the South (10 percent), Midwest (15 percent), or West (24 percent) (figure 6.10).

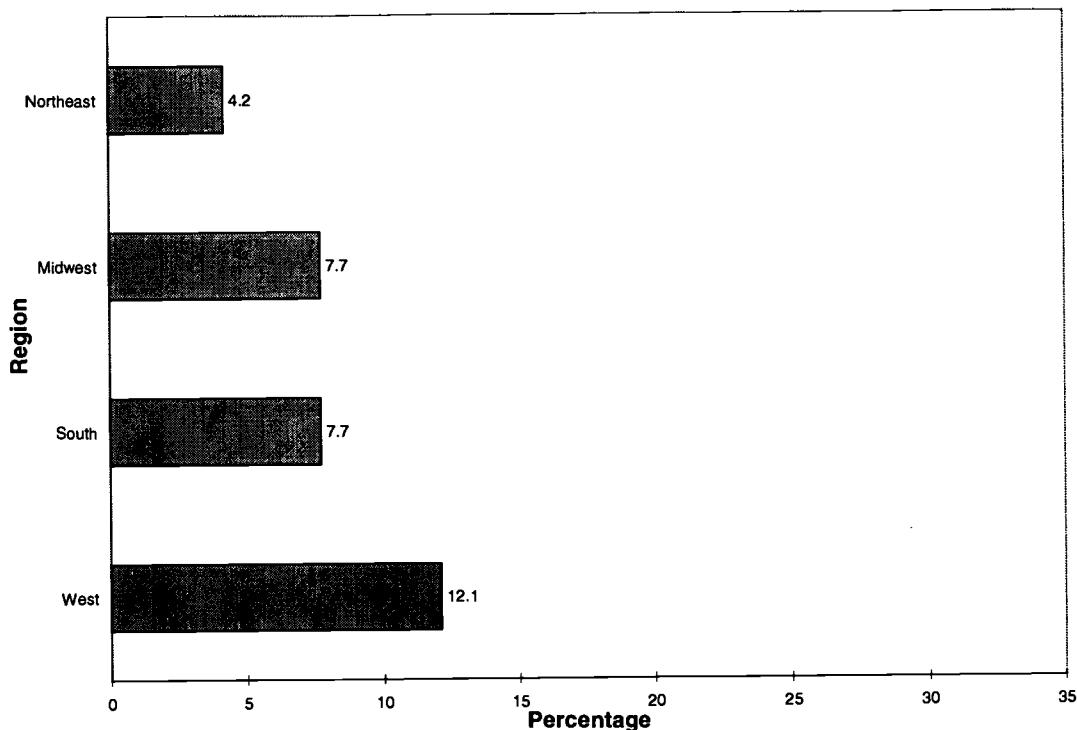
Figure 6.10—Percentage of districts with within-district open enrollment programs, by region: 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Magnet School Programs

The prevalence and distribution of magnet programs were similar to these patterns of within-district open enrollment programs. Proportionally fewer school districts in the Northeast (4 percent) offered these kinds of programs in 1993-94 than districts in West (12 percent), (figure 6.11). Eight percent of the districts in the South and Midwest offered magnet choice programs.

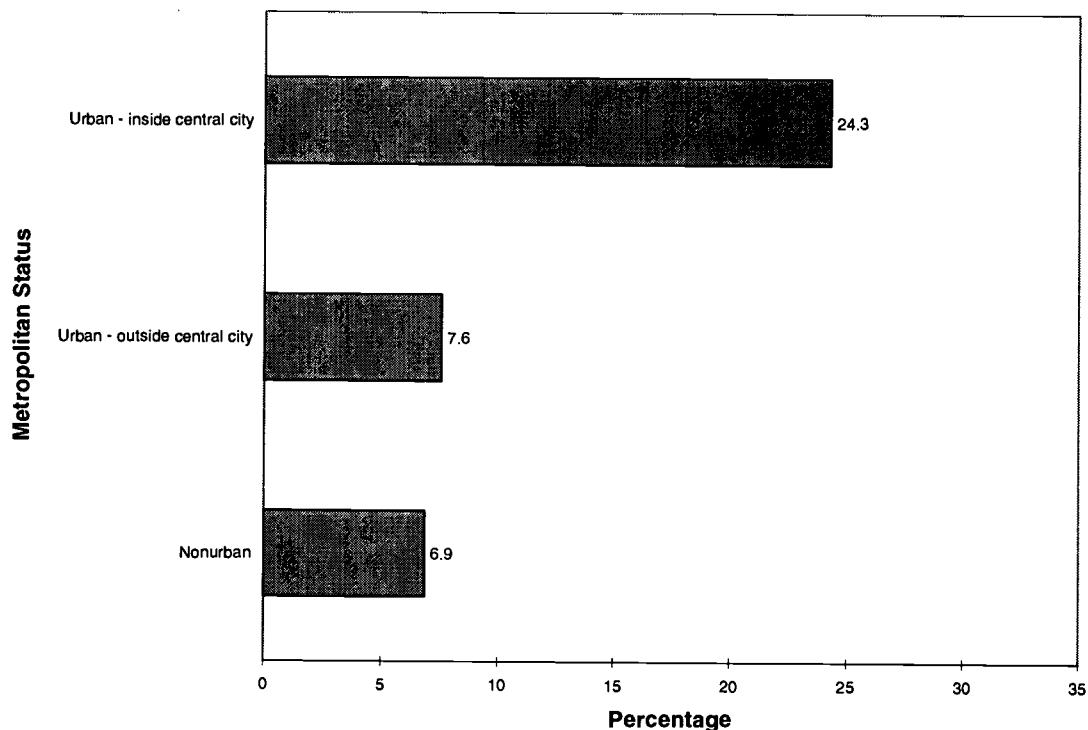
Figure 6.11—Percentage of districts with magnet schools, by region: 1993-94

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Magnet school programs were most prevalent in districts with enrollments of 10,000 or more (33 percent). Comparable proportions of districts with enrollments between 1,000 and 9,999 (7 percent), and districts with fewer than 1,000 students (6 percent) offered magnet programs (table 6.5).²⁸ Similarly, the prevalence of magnet school programs was highest in districts in urban areas inside central cities (24 percent). Comparable proportions of districts in urban areas outside central cities (8 percent) and nonurban districts (7 percent) offered magnet programs (figure 6.12).

²⁸ Smaller districts may only have one school serving students at each grade level. The concept of magnet schools as a within-district choice program in this kind of district is not meaningful. This may explain why the prevalence of magnet programs is lowest in the smallest districts.

Figure 6.12—Percentage of districts with magnet schools, by metropolitan status: 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Magnet school program prevalence was associated with the proportions of minority students and minority teachers in a district. Their prevalence was highest in districts with 50 percent or more minority students—with 13 percent of these districts offering magnet programs (table 6.5). This was greater than the prevalence in districts that were between 10 percent and 50 percent minority (8 percent) or in districts that had fewer than 10 percent minority students (7 percent). Likewise, magnet program prevalence rates (14 percent) were highest in districts where at least 20 percent of the teachers were minority. Only 9 percent of the districts that had some, but fewer than 20 percent minority teachers, and 6 percent of the districts that had no minority teachers offered magnet programs.

Between-District Transfer Programs

While 8 percent of the nation's school districts offered magnet school programs in 1993-94 and 14 percent offered within-district open enrollment programs, 29 percent of the districts allowed their students to enroll in other districts, and 26 percent permitted other students to enroll in their districts (table 6.5).

Interdistrict choice programs were most prevalent in districts in the West (transferring out, in 42 percent of the districts; transferring in, 38 percent of the districts) and in the Midwest (35 percent permitting transferring out and 30 percent, transferring in). The proportion of districts offering an interdistrict transfer program in these regions was greater than the proportions offering these programs in the South (24 percent permitting transferring out; 24 percent, transferring in). Interdistrict choice programs were less likely to be offered by

school districts in the Northeast (10 percent allowing transferring out and 9 percent allowing transferring in) than in any other region.

Written District Policies about Student Discipline and Alcohol, Drug, and Tobacco Use

In 1993-94, nearly all (99 percent) of the nation's school districts had written policies about general student discipline, alcohol use, and drug use (appendix A, table 46). Nearly all (98 percent) also had written policies about tobacco use. These written policies undoubtedly differed. However, since only their prevalence was assessed in the Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire), comparisons with respect to policy content or intensity are not possible.

Chapter 7

Future Research Directions

This report provides descriptive summaries of the characteristics of school districts. For comparative purposes, districts were categorized with respect to general demographic features: their size (enrollment), the racial composition of their student body, the racial composition of their faculty, the region of the country in which they are located, and their metropolitan status. This permitted associations between district demographic features and the factors measured in the SASS Teacher Demand and Shortage Questionnaires to be noted and reported. Whenever possible, school district characteristics in 1987-88, 1990-91, and 1993-94 were compared.

Many significant relationships are noted. These relationships can lead to innumerable hypotheses about their causes, their impacts, and their possible persistence. Such hypotheses can be investigated in other studies. We hope this descriptive report will stimulate further investigations.

Through use of common identifiers, it is possible to link data from the Schools and Staffing Surveys: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire) with other NCES data collections. Within the Schools and Staffing Surveys (SASS), information about a district's characteristics, as measured in the Teacher Demand and Shortage Questionnaire, can easily be linked with data about the districts' schools, principals, and teachers, as measured in other SASS instruments. Linkages are also possible with other data sources, including 1990 Census data, which can be analyzed in the context of school districts and their characteristics. For example, these Census data can be used to categorize districts according to the proportion of their children who are living in poverty, enabling comparisons of the characteristics of high- and low-poverty school districts.

Even without additional data sources, there are many opportunities to use these data to address a variety of issues. For example, the Teacher Demand and Shortage Questionnaires provide information about the racial composition of both a district's students and its faculty. In 1993-94, districts with high concentrations of minority students were more likely to have high proportions of minority faculty than other districts. Were these districts more likely to be found in certain states or regions? Were they more likely to be large or small districts? In central cities or elsewhere? In large districts or in small? What would these relationships be like for Hispanic students and Hispanic teachers? For Native American students and Native American teachers?

When relationships between several different district demographic features and certain outcomes were observed, with which specific district demographic factor are they most strongly associated? Since there were significant associations between all of these demographic features (i.e., central city districts tend to be larger than other districts; larger

districts tend to have higher proportions of minority students and teachers than other types of districts), it is not clear with which of these factors a particular characteristic is most strongly associated. For example, in 1993-94, districts with over 10,000 students, districts in which 50 percent or more of the students were minorities, districts in which 20 percent or more of the staff were minorities, and central city school districts were more likely to offer pay incentives to recruit or retain teachers and to offer free training to prepare staff members to teach in fields of shortage. Multivariate analyses can be employed to identify the factor(s) with which these incentives are most strongly associated, independent of other district characteristics, and to investigate other factors that might be compelling these districts to offer incentives.

Descriptive analyses do not explain why certain relationships are observed. For example, the general associations between higher scheduled salaries and the presence of collective bargaining units in nearly all kinds of districts in 1993-94 is worthy of further investigation. These findings are only suggestive and cannot be used to demonstrate causality.

Multivariate analyses, to allow control for relationships among the district characteristics reported upon, can be conducted to inform about the importance of specific district characteristics. These analyses could also include data from external sources, to permit tests of hypotheses about associations with other factors of interest.

The reader is encouraged to refer to the Technical Notes to learn more about how to obtain and use SASS data.

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Appendix A

Tables of Estimates

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Section 1

Selected District Characteristics Tables

Table A-1. Number and percentage of school districts, by selected district characteristics: 1987-88 to 1993-94

District Characteristic	School Year					
	1987-88		1990-91		1993-94	
	Number	Percent	Number	Percent	Number	Percent
TOTAL	15,244	100.0	15,512	100.0	14,987	100.0
District Size						
Under 1,000	7,953	52.2	8,430	54.3	7,626	50.9
1,000 to 9,999	6,654	43.7	6,405	41.3	6,652	44.4
10,000 or more	637	4.2	678	4.4	708	4.7
Minority Students^a						
Under 10%	9,862	65.0	10,008	64.6	9,047	60.6
10% to under 50%	3,390	22.4	3,947	25.5	4,283	28.7
50% or more	1,910	12.6	1,528	9.9	1,611	10.8
Minority Teachers						
None	7,855	51.5	7,962	51.3	7,295	48.7
More than 0% to under 20%	6,015	39.5	6,382	41.1	6,653	44.4
20% or more	1,373	9.0	1,168	7.5	1,039	6.9
Metro Status						
Urban-inside central city	-	-	684	4.4	561	3.7
Urban-outside central city	-	-	5,830	37.6	6,003	40.1
Nonurban area	-	-	8,998	58.0	8,423	56.2
Region						
Northeast	3,086	20.2	3,102	20.0	3,094	20.6
Midwest	5,903	38.7	5,922	38.2	5,652	37.7
South	3,475	22.8	3,415	22.0	3,306	22.1
West	2,780	18.2	3,073	19.8	2,935	19.6

^a Metro status data not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

a) Districts without students were excluded for this characteristic only.

Details may not add to totals and percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-2. Number and percentage of school districts by metropolitan status, by region: 1990-91 to 1993-94

District Characteristic	School Year			
	1990-91 Number	1990-91 Percent	1993-94 Number	1993-94 Percent
TOTAL	15,512	100.0	14,987	100.0
Region by Metropolitan Status				
Northeast				
Urban-inside central city	101	0.6	85	0.6
Urban-outside central city	1,915	12.3	1,958	13.1
Nonurban area	1,086	7.0	1,050	7.0
Midwest				
Urban-inside central city	154	1.0	157	1.0
Urban-outside central city	1,875	12.1	1,939	12.9
Nonurban area	3,894	25.1	3,556	23.7
South				
Urban-inside central city	180	1.2	185	1.2
Urban-outside central city	881	5.7	896	6.0
Nonurban area	2,354	15.2	2,224	14.8
West				
Urban-inside central city	249	1.6	134	0.9
Urban-outside central city	1,160	7.5	1,209	8.1
Nonurban area	1,664	10.7	1,592	10.6

Details may not add to totals and percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire).

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Table A-3. Number and percentage of school districts by percent minority students, by region: 1987-88 to 1993-94

District Characteristic	School Year					
	1987-88		1990-91		1993-94	
	Number	Percent	Number	Percent	Number	Percent
TOTAL	15,244	100.0	15,512	100.0	14,987	100.0
Region by Percent Minority Students^a						
Northeast						
Under 10%	2,541	16.7	2,490	16.1	2,273	15.2
10% to under 50%	362	2.4	488	3.1	670	4.5
50% or more	182	1.2	122	0.8	138	0.9
Midwest						
Under 10%	4,937	32.4	4,976	32.1	4,702	31.4
10% to under 50%	642	4.2	783	5.0	798	5.3
50% or more	274	1.8	153	1.0	125	0.8
South						
Under 10%	1,233	8.1	1,085	7.0	866	5.8
10% to under 50%	1,469	9.6	1,678	10.8	1,714	11.4
50% or more	769	5.0	652	4.2	726	4.8
West						
Under 10%	1,151	7.6	1,457	9.4	1,206	8.0
10% to under 50%	917	6.0	998	6.4	1,101	7.3
50% or more	685	4.5	601	3.9	621	4.1

a) Excludes 82 districts with no students in 1987-88, 29 districts with no students in 1990-91, and 45 districts with no students in 1993-94.

Details may not add to totals and percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-4. Number and percentage of school districts by district size, by region: 1987-88 to 1993-94

District Characteristic	School Year					
	1987-88		1990-91		1993-94	
	Number	Percent	Number	Percent	Number	Percent
TOTAL	15,244	100.0	15,512	100.0	14,987	100.0
Region by District Size						
Northeast						
Under 1,000	1,278	8.4	1,303	8.4	1,216	8.1
1,000 to 9,999	1,761	11.6	1,753	11.3	1,829	12.2
10,000 or more	47	0.3	46	0.3	49	0.3
Midwest						
Under 1,000	3,559	23.3	3,643	23.5	3,324	22.2
1,000 to 9,999	2,232	14.6	2,159	13.9	2,204	14.7
10,000 or more	112	0.7	120	0.8	124	0.8
South						
Under 1,000	1,458	9.6	1,473	9.5	1,338	8.9
1,000 to 9,999	1,733	11.4	1,655	10.7	1,664	11.1
10,000 or more	283	1.9	287	1.8	305	2.0
West						
Under 1,000	1,657	10.9	2,011	13.0	1,748	11.7
1,000 to 9,999	927	6.1	838	5.4	955	6.4
10,000 or more	195	1.3	224	1.4	231	1.5

Details may not add to totals and percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-5. Number and percentage of school districts by district size, by metropolitan status: 1990-91 to 1993-94

District Characteristic	School Year			
	1990-91 Number	1990-91 Percent	1993-94 Number	1993-94 Percent
TOTAL	15,512	100.0	14,987	100.0
Metro Status by District Size				
Urban-inside central city				
Under 1,000	..	..	..	..
1,000 to 9,999	232	1.5	255	1.7
10,000 or more	254	1.6	247	1.6
Urban-outside central city				
Under 1,000	2,182	14.1	2,108	14.1
1,000 to 9,999	3,285	21.2	3,498	23.3
10,000 or more	364	2.3	396	2.6
Nonurban area				
Under 1,000	6,050	39.0	5,459	36.4
1,000 to 9,999	2,888	18.6	2,899	19.3
10,000 or more	60	0.4	65	0.4

.. Too few cases for a reliable estimate.

Details may not add to totals and percentages may not sum to 100 due to rounding or cell suppression.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-6. Number and percentage of school districts by percent minority teachers, by region: 1987-88 to 1993-94

District Characteristic	School Year					
	1987-88		1990-91		1993-94	
	Number	Percent	Number	Percent	Number	Percent
TOTAL	15,244	100.0	15,512	100.0	14,987	100.0
Region by Percent Minority Teachers						
Northeast						
None	1,757	11.5	1,703	11.0	1,525	10.2
More than 0% to under 20%	1,254	8.2	1,323	8.5	1,535	10.2
20% or more	74	0.5	--	--	34	0.2
Midwest						
None	4,084	26.8	4,082	26.3	4,021	26.8
More than 0% to under 20%	1,661	10.9	1,719	11.1	1,555	10.4
20% or more	159	1.0	121	0.8	77	0.5
South						
None	890	5.8	894	5.8	718	4.8
More than 0% to under 20%	1,753	11.5	1,807	11.6	1,909	12.7
20% or more	832	5.5	713	4.6	679	4.5
West						
None	1,124	7.4	1,283	8.3	1,031	6.9
More than 0% to under 20%	1,348	8.8	1,533	9.9	1,654	11.0
20% or more	308	2.0	258	1.7	249	1.7

-- Too few cases for a reliable estimate.

Details may not add to totals and percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-7. Number of full and part time teachers and percentage minority, by selected district characteristics: 1987-88 to 1993-94

District Characteristic	School Year					
	1987-88		1990-91		1993-94	
	Number of Teachers	Percent Minority	Number of Teachers	Percent Minority	Number of Teachers	Percent Minority
TOTAL	2,511,304	13.6	2,565,862	13.6	2,599,569	13.0
District Size						
Under 1,000	248,313	4.2	258,208	4.1	228,003	3.5
1,000 to 9,999	1,255,495	8.3	1,215,699	7.5	1,234,226	7.3
10,000 or more	1,007,496	22.6	1,091,954	22.7	1,137,340	21.2
Minority Students^a						
Under 10%	993,086	2.1	945,665	1.5	854,306	1.1
10% to under 50%	875,562	11.6	983,937	10.3	1,070,211	9.5
50% or more	639,782	34.4	635,783	36.8	673,371	33.8
Minority Teachers						
None	450,210	0.0	411,901	0.0	391,837	0.0
More than 0% to under 20%	1,406,698	6.1	1,522,993	6.3	1,580,684	6.5
20% or more	654,396	39.1	630,968	40.1	627,048	37.7
Metro Status						
Urban-inside central city	-	-	675,491	27.3	638,597	26.8
Urban-outside central city	-	-	1,221,535	8.7	1,282,092	9.0
Nonurban area	-	-	668,836	8.8	678,880	7.8
Region by Percent Minority Students^a						
Northeast	566,673	9.0	558,104	8.0	543,742	9.2
Under 10%	306,479	1.6	303,841	1.0	252,730	0.8
10% to under 50%	108,261	5.1	126,726	3.8	144,707	4.3
50% or more	151,933	26.6	127,284	29.0	145,535	28.6
Midwest	651,832	8.5	629,844	8.5	606,337	5.5
Under 10%	424,516	1.9	386,449	1.2	372,925	0.8
10% to under 50%	143,303	8.2	155,199	6.9	168,895	5.7
50% or more	81,600	43.5	88,040	43.1	63,648	32.7
South	850,370	20.5	930,254	19.4	973,724	19.1
Under 10%	162,138	2.6	165,970	2.6	153,839	1.9
10% to under 50%	430,879	15.3	512,269	13.6	531,782	12.9
50% or more	257,008	40.5	252,015	42.2	288,103	39.7
West	442,429	13.9	447,660	16.0	475,765	14.7
Under 10%	99,953	3.2	89,405	2.5	74,812	1.9
10% to under 50%	193,119	9.5	189,744	8.7	224,828	7.7
50% or more	149,240	26.6	168,443	31.2	176,084	28.9

^a Metro status data not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-8. Number of students and percentage minority, by selected district characteristics: 1987-88 to 1993-94

District Characteristic	School Year					
	1987-88		1990-91		1993-94	
	Number of Students	Percent Minority	Number of Students	Percent Minority	Number of Students	Percent Minority
TOTAL	39,761,316	30.4	40,930,167	31.7	42,302,143	33.2
District Size						
Under 1,000	2,980,475	12.6	3,138,848	13.1	2,964,507	13.5
1,000 to 9,999	19,333,146	19.2	18,813,338	19.2	19,788,834	21.9
10,000 or more	17,447,695	45.8	18,977,982	47.2	19,548,801	47.7
Minority Students^a						
Under 10%	14,942,783	3.4	14,410,735	3.7	13,380,715	3.8
10% to under 50%	14,348,639	26.6	15,648,359	27.4	17,464,992	28.0
50% or more	10,469,894	74.0	10,871,073	75.1	11,456,436	75.5
Minority Teachers						
None	6,152,291	3.6	5,897,828	4.4	5,868,267	4.3
More than 0% to under 20%	22,453,967	20.3	24,272,297	21.3	25,826,876	23.7
20% or more	11,155,059	65.4	10,760,042	70.1	10,607,000	72.3
Metro Status						
Urban-inside central city	-	-	10,888,873	57.9	10,602,701	59.3
Urban-outside central city	-	-	19,606,180	23.6	21,331,290	26.2
Nonurban area	-	-	10,435,115	19.7	10,368,152	20.9
Region by Percent Minority Students^a						
Northeast	7,481,413	26.9	7,273,135	26.0	7,686,025	29.0
Under 10%	4,139,673	3.0	3,906,722	3.4	3,605,704	3.6
10% to under 50%	1,235,455	23.1	1,504,876	22.4	1,952,873	22.2
50% or more	2,106,284	76.3	1,861,538	76.4	2,127,448	78.2
Midwest	9,863,597	18.6	9,892,476	18.8	9,634,486	17.1
Under 10%	6,241,205	2.9	6,160,743	3.3	5,986,544	3.4
10% to under 50%	2,288,284	25.1	2,412,087	24.6	2,651,862	25.5
50% or more	1,334,108	80.7	1,319,646	81.1	996,080	77.4
South	14,149,220	35.5	14,612,010	37.0	15,366,030	39.1
Under 10%	2,804,619	4.1	2,647,609	4.1	2,416,770	4.3
10% to under 50%	7,228,824	27.9	7,832,657	29.4	8,430,669	30.3
50% or more	4,115,777	70.3	4,131,744	72.5	4,518,591	74.1
West	8,267,086	38.7	9,152,546	41.7	9,615,602	43.3
Under 10%	1,757,285	5.3	1,695,661	5.5	1,371,696	5.6
10% to under 50%	3,596,076	26.1	3,898,740	26.9	4,429,589	27.7
50% or more	2,913,725	74.3	3,558,145	75.2	3,814,317	75.0

- Metro status data not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-9. Number of full and part time teachers and percentage by race and ethnicity, by selected district characteristics: 1993-94

District Characteristic	Total Teachers	Percent by Race and Ethnicity					
		American	Indian	Asian	Hispanic	Black	
TOTAL	2,599,569	0.3		1.0	3.4	8.2	87.0
District Size							
Under 1,000	228,003	1.0		0.3	1.1	1.2	96.5
1,000 to 9,999	1,234,226	0.3		0.4	1.8	4.8	92.7
10,000 or more	1,137,340	0.3		1.9	5.6	13.4	78.8
Minority Students^a							
Under 10%	854,306	0.1		0.2	0.3	0.5	98.9
10% to under 50%	1,070,211	0.4		0.6	1.9	6.7	90.5
50% or more	673,371	0.6		2.8	9.9	20.5	66.2
Minority Teachers							
None	391,837	0.0		0.0	0.0	0.0	100.0
More than 0% to under 20%	1,580,684	0.3		0.6	1.7	3.8	93.5
20% or more	627,048	0.6		2.8	9.8	24.5	62.3
Metro Status							
Urban-inside central city	638,597	0.3		2.7	7.0	16.9	73.2
Urban-outside central city	1,282,092	0.3		0.7	2.7	5.3	91.0
Nonurban area	678,880	0.6		0.2	1.4	5.6	92.2
Region by Percent Minority Students^a							
Northeast	543,742	0.1		0.6	2.6	5.9	90.9
Under 10%	252,730	0.1		0.1	0.3	0.3	99.2
10% to under 50%	144,707	0.1		0.3	1.1	2.8	95.7
50% or more	145,535	0.1		1.6	8.1	18.9	71.4
Midwest	606,337	0.2		0.2	0.6	4.5	94.5
Under 10%	372,925	0.1		0.1	0.2	0.3	99.2
10% to under 50%	168,895	0.2		0.4	0.8	4.3	94.3
50% or more	63,648	0.5		0.5	1.9	29.8	67.3
South	973,724	0.3		0.3	4.2	14.3	80.9
Under 10%	153,839	0.2		0.1	0.2	1.5	98.1
10% to under 50%	531,782	0.4		0.3	1.6	10.7	87.1
50% or more	288,103	0.3		0.4	11.0	27.9	60.3
West	475,765	0.9		4.1	6.5	3.1	85.4
Under 10%	74,812	0.4		0.7	0.7	0.2	98.1
10% to under 50%	224,828	0.7		1.7	3.9	1.5	92.3
50% or more	176,084	1.3		8.7	12.5	6.5	71.1

a) Districts without students were excluded for this characteristic only.

Details may not add to totals and percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-10. Number of students and percentage by race and ethnicity, by selected district characteristics: 1993-94

District Characteristic	Total Students	Percent by Race and Ethnicity				
		American Indian	Asian	Hispanic	Black	White
TOTAL	42,302,143	1.1	3.6	12.3	16.2	66.8
District Size						
Under 1,000	2,964,507	3.2	0.9	5.8	3.6	86.5
1,000 to 9,999	19,788,834	1.2	2.1	7.7	10.9	78.1
10,000 or more	19,548,801	0.7	5.5	17.9	23.5	52.3
Minority Students^a						
Under 10%	13,380,715	0.4	0.9	1.1	1.4	96.2
10% to under 50%	17,464,992	1.3	3.4	8.1	15.2	72.0
50% or more	11,456,436	1.7	6.9	31.8	35.0	24.5
Minority Teachers						
None	5,868,267	0.8	0.6	1.5	1.4	95.7
More than 0% to under 20%	25,826,876	1.1	3.4	8.9	10.3	76.3
20% or more	10,607,000	1.3	5.7	26.5	38.8	27.7
Metro Status						
Urban-inside central city	10,602,701	0.6	6.3	22.9	29.5	40.7
Urban-outside central city	21,331,290	0.7	3.7	10.5	11.4	73.8
Nonurban area	10,368,152	2.6	0.6	5.3	12.4	79.1
Region by Percent Minority Students^a						
Northeast	7,686,025	0.3	3.7	10.1	14.9	71.0
Under 10%	3,605,704	0.2	1.1	1.0	1.4	96.4
10% to under 50%	1,952,873	0.3	5.0	6.6	10.4	77.8
50% or more	2,127,448	0.5	6.9	28.8	42.0	21.8
Midwest	9,634,486	0.9	1.6	2.6	11.9	82.9
Under 10%	5,986,544	0.4	0.9	1.0	1.2	96.6
10% to under 50%	2,651,862	1.8	2.9	4.5	16.2	74.5
50% or more	996,080	2.1	2.8	7.3	65.3	22.6
South	15,366,030	0.8	1.5	10.9	25.9	60.9
Under 10%	2,416,770	0.2	0.4	0.8	2.8	95.7
10% to under 50%	8,430,669	1.0	1.9	5.7	21.7	69.7
50% or more	4,518,591	0.9	1.2	25.8	46.2	25.9
West	9,615,602	2.4	8.9	26.1	6.0	56.7
Under 10%	1,371,696	1.0	1.3	2.7	0.5	94.4
10% to under 50%	4,429,589	2.0	6.0	15.3	4.3	72.3
50% or more	3,814,317	3.4	14.8	46.9	10.0	25.0

a) Districts without students were excluded for this characteristic only.

Details may not add to totals and percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-11. Total number of full time equivalent (FTE) teachers and percentage that consists of new hires, by selected district characteristics: 1993-94

District Characteristic	Total FTE Teachers	Percent New Hires
TOTAL	2,501,112	7.9
District Size		
Under 1,000	220,375	8.7
1,000 to 9,999	1,196,629	7.5
10,000 or more	1,084,109	8.2
Minority Students ^a		
Under 10%	826,141	6.7
10% to under 50%	1,029,081	8.5
50% or more	644,247	8.3
Minority Teachers		
None	380,915	6.9
More than 0% to under 20%	1,520,281	8.0
20% or more	599,916	8.2
Metro Status		
Urban-inside central city	608,886	7.3
Urban-outside central city	1,232,452	8.1
Nonurban area	659,775	8.1
Region by Metro Status		
Northeast	518,626	5.7
Urban-inside central city	140,208	4.3
Urban-outside central city	301,144	6.0
Nonurban area	77,274	6.6
Midwest	584,495	6.5
Urban-inside central city	120,577	5.3
Urban-outside central city	273,959	6.5
Nonurban area	189,959	7.2
South	945,971	9.6
Urban-inside central city	225,775	10.0
Urban-outside central city	421,155	10.1
Nonurban area	299,040	8.7
West	452,020	8.7
Urban-inside central city	122,325	7.7
Urban-outside central city	236,193	9.0
Nonurban area	93,502	9.1

a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-12. Number of newly hired FTE teachers and percentage of newly hired FTE teachers with regular state certification, newly hired FTE teachers with emergency certification, and newly hired FTE teachers lacking regular state or emergency certification in their field of assignment, by selected district characteristics: 1993-94

District Characteristic	Number of Newly Hired Teachers	Percent Newly Hired with Regular State Certification in Field of Assignment	Percent Newly Hired with Emergency Certification	Percent Newly Hired lacking Regular State or Emergency Certification in Field of Assignment
TOTAL	197,323	86.5	7.6	5.9
District Size				
Under 1,000	19,091	90.9	6.3	2.8
1,000 to 9,999	89,388	90.2	6.1	3.7
10,000 or more	88,844	81.8	9.3	8.9
Minority Students^a				
Under 10%	55,621	93.9	2.9	3.2
10% to under 50%	87,880	88.8	6.4	4.8
50% or more	53,682	75.0	14.3	10.7
Minority Teachers				
None	26,152	94.5	3.2	2.3
More than 0% to under 20%	121,806	90.0	5.7	4.4
20% or more	49,364	73.7	14.5	11.8
Metro Status				
Urban-inside central city	44,389	79.0	10.5	10.5
Urban-outside central city	99,613	88.4	6.4	5.2
Nonurban area	53,322	89.2	7.2	3.6
Region by Metro Status				
Northeast	29,303	94.4	2.2	3.4
Urban-inside central city	6,004	91.7	3.3	5.1
Urban-outside central city	18,199	94.7	1.7	3.5
Nonurban area	5,100	96.2	2.6	1.2
Midwest	37,916	95.5	2.7	1.8
Urban-inside central city	6,431	95.2	4.2	0.6
Urban-outside central city	17,794	96.2	2.1	1.7
Nonurban area	13,691	94.7	2.8	2.5
South	90,906	82.4	9.5	8.1
Urban-inside central city	22,499	76.0	10.3	13.7
Urban-outside central city	42,412	84.3	8.3	7.3
Nonurban area	25,995	84.7	10.7	4.5
West	39,198	81.4	11.7	6.8
Urban-inside central city	9,456	67.0	20.0	13.0
Urban-outside central city	21,206	84.6	10.3	5.1
Nonurban area	8,536	89.6	6.2	4.2

a) Districts without students were excluded for this characteristic only.

Details may not add to totals and percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-13. Percentage of school districts with different criteria for considering applicants for teaching positions, by selected district characteristics: 1993-94

District Characteristic	Certification Type			Graduate of Teacher Ed. Program	Special Knowledge Test	
	Full Standard	Emergency/ Temporary	College Major/Minor in Teaching Field		District or State	National Teacher Exam
TOTAL	83.3	67.4	71.9	66.9	51.2	30.7
District Size						
Under 1,000	83.8	63.7	73.7	65.1	48.6	24.1
1,000 to 9,999	83.6	70.4	70.2	69.9	53.5	37.7
10,000 or more	74.5	80.4	68.1	57.7	57.7	37.0
Minority Students ^a						
Under 10%	87.3	64.4	75.1	73.0	43.0	30.1
10% to under 50%	77.2	70.6	67.5	58.2	61.0	30.8
50% or more	76.4	76.6	65.5	55.2	70.2	34.1
Minority Teachers						
None	86.0	63.4	76.2	72.1	43.6	26.2
More than 0% to under 20%	81.9	70.0	67.7	62.4	57.7	33.2
20% or more	73.0	79.1	68.9	58.8	62.9	47.2
Metro Status						
Urban-inside central city	76.5	81.8	67.7	60.2	61.8	32.5
Urban-outside central city	86.1	67.5	65.9	62.7	55.1	31.6
Nonurban area	81.7	66.5	76.5	70.3	47.8	30.0
Region by Metro Status						
Northeast	93.0	61.3	56.7	63.7	40.8	50.0
Urban-inside central city	86.3	66.5	39.0	55.1	49.2	50.9
Urban-outside central city	92.6	58.1	51.9	60.4	43.0	54.0
Nonurban area	94.3	66.8	67.0	70.7	36.1	42.5
Midwest	87.5	63.8	81.3	77.3	43.1	17.0
Urban-inside central city	89.1	78.7	92.8	71.2	39.9	27.5
Urban-outside central city	89.0	64.5	77.7	76.6	49.4	16.2
Nonurban area	86.6	62.8	82.8	78.0	39.8	17.0
South	70.1	78.2	73.6	62.0	68.6	38.1
Urban-inside central city	73.5	86.4	58.8	59.8	71.4	28.2
Urban-outside central city	69.6	80.2	69.4	63.0	68.9	35.4
Nonurban area	70.0	76.8	76.5	61.7	68.3	40.1
West	79.8	68.8	67.9	55.7	58.1	28.5
Urban-inside central city	59.8	89.0	68.9	50.8	82.2	32.7
Urban-outside central city	83.1	78.0	67.0	44.1	73.5	17.4
Nonurban area	78.9	60.1	68.4	64.8	44.5	36.6

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-14. Number and percentage of full time equivalent (FTE) teachers with standard state certification in their field of assignment, by selected district characteristics: 1993-94

District Characteristic	Total FTE Teachers	Percent
TOTAL	2,501,112	97.4
District Size		
Under 1,000	220,375	98.3
1,000 to 9,999	1,196,629	98.3
10,000 or more	1,084,109	96.3
Minority Students^a		
Under 10%	826,141	98.9
10% to under 50%	1,029,081	97.5
50% or more	644,247	95.4
Minority Teachers		
None	380,915	98.8
More than 0% to under 20%	1,520,281	98.1
20% or more	599,916	94.8
Metro Status		
Urban-inside central city	608,886	95.7
Urban-outside central city	1,232,452	98.0
Nonurban area	659,775	97.9
Region by Metro Status		
Northeast	518,626	99.2
Urban-inside central city	140,208	99.2
Urban-outside central city	301,144	99.3
Nonurban area	77,274	99.2
Midwest	584,495	99.1
Urban-inside central city	120,577	99.1
Urban-outside central city	273,959	99.2
Nonurban area	189,959	99.2
South	945,971	95.8
Urban-inside central city	225,775	92.2
Urban-outside central city	421,155	97.0
Nonurban area	299,040	96.8
West	452,020	96.5
Urban-inside central city	122,325	94.9
Urban-outside central city	236,193	96.7
Nonurban area	93,502	98.0

a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-15. Number and percentage of full time equivalent (FTE) itinerant teachers and the number and percentage of school districts employing itinerant teachers, by selected district characteristics: 1993-94

District Characteristic	FTE Itinerant Teachers Number	FTE Itinerant Teachers Percent	Districts Employing Itinerant Teachers Number	Districts Employing Itinerant Teachers Percent
TOTAL	102,282	4.1	8,387	56.0
District Size				
Under 1,000	10,455	4.7	2,708	35.5
1,000 to 9,999	51,003	4.3	5,042	75.8
10,000 or more	40,825	3.8	637	89.9
Minority Students^a				
Under 10%	38,380	4.6	4,789	52.9
10% to under 50%	39,414	3.8	2,565	59.9
50% or more	24,242	3.8	998	62.0
Minority Teachers				
None	18,196	4.8	3,278	44.9
More than 0% to under 20%	62,293	4.1	4,425	66.5
20% or more	21,794	3.6	685	66.0
Metro Status				
Urban-inside central city	27,497	4.5	446	79.5
Urban-outside central city	47,561	3.9	3,788	63.1
Nonurban area	27,224	4.1	4,154	49.3
Region by Metro Status				
Northeast	31,064	6.0	2,099	67.8
Urban-inside central city	10,214	7.3	79	92.3
Urban-outside central city	17,019	5.7	1,367	69.8
Nonurban area	3,830	5.0	653	62.2
Midwest	29,709	5.1	3,013	53.3
Urban-inside central city	7,281	6.0	125	79.5
Urban-outside central city	12,583	4.6	1,240	63.9
Nonurban area	9,845	5.2	1,649	46.4
South	27,707	2.9	1,938	58.6
Urban-inside central city	6,511	2.9	149	80.5
Urban-outside central city	11,278	2.7	594	66.3
Nonurban area	9,918	3.3	1,194	53.7
West	13,803	3.1	1,337	45.6
Urban-inside central city	3,490	2.9	93	69.8
Urban-outside central city	6,681	2.8	586	48.5
Nonurban area	3,631	3.9	657	41.3

a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-16. Percentage of school districts with at least one approved teaching position not filled by a permanent teacher, by selected district characteristics: 1987-88 to 1993-94

District Characteristic	School Year		
	1987-88 Percent	1990-91 Percent	1993-94 Percent
TOTAL	21.4	14.5	14.3
District Size			
Under 1,000	15.5	8.0	7.9
1,000 to 9,999	26.5	19.6	18.3
10,000 or more	42.2	46.1	46.3
Minority Students^a			
Under 10%	19.5	10.9	9.2
10% to under 50%	20.2	16.5	18.3
50% or more	32.5	33.0	32.5
Minority Teachers			
None	16.2	8.4	8.5
More than 0% to under 20%	24.3	18.8	16.6
20% or more	39.0	32.3	40.4
Metro Status			
Urban-inside central city	-	32.7	40.9
Urban-outside central city	-	18.5	16.3
Nonurban area	-	10.4	11.1
Region by Metro Status			
Northeast	-	18.9	14.9
Urban-inside central city	-	34.3	33.8
Urban-outside central city	-	19.8	17.2
Nonurban area	-	15.8	9.2
Midwest	-	9.3	9.5
Urban-inside central city	-	34.4	33.1
Urban-outside central city	-	14.3	8.7
Nonurban area	-	5.8	8.9
South	-	17.4	19.0
Urban-inside central city	-	47.4	39.1
Urban-outside central city	-	16.9	20.9
Nonurban area	-	15.3	16.5
West	-	16.8	17.6
Urban-inside central city	-	20.4	57.1
Urban-outside central city	-	24.4	23.4
Nonurban area	-	10.9	9.8

^a Metro status data not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-17. Number and percentage of approved full time equivalent (FTE) teaching positions not filled by permanent teachers, by selected district characteristics: 1987-88 to 1993-94

District Characteristic	School Year					
	1987-88		1990-91		1993-94	
	Number of Positions	Percent of Total FTE	Number of Positions	Percent of Total FTE	Number of Positions	Percent of Total FTE
TOTAL	22,978	1.0	14,287	0.6	8,691	0.3
District Size						
Under 1,000	3,222	1.5	1,475	0.7	730	0.3
1,000 to 9,999	10,345	0.9	5,047	0.5	2,712	0.2
10,000 or more	9,410	1.0	7,766	0.8	5,248	0.5
Minority Students^a						
Under 10%	9,385	1.0	3,705	0.4	1,265	0.2
10% to under 50%	7,898	1.0	3,298	0.4	2,532	0.2
50% or more	5,629	1.0	7,240	1.2	4,866	0.8
Minority Teachers						
None	4,028	1.0	1,679	0.4	853	0.2
More than 0% to under 20%	13,636	1.0	5,964	0.4	3,435	0.2
20% or more	5,314	0.9	6,644	1.1	4,403	0.7
Metro Status						
Urban-inside central city	-	-	6,236	1.1	3,928	0.6
Urban-outside central city	-	-	5,626	0.5	3,080	0.2
Nonurban area	-	-	2,426	0.4	1,683	0.3
Region by Metro Status						
Northeast	-	-	2,383	0.5	1,319	0.3
Urban-inside central city	-	-	542	0.4	521	0.4
Urban-outside central city	-	-	1,425	0.5	651	0.2
Nonurban area	-	-	416	0.5	148	0.2
Midwest	-	-	2,728	0.5	1,405	0.2
Urban-inside central city	-	-	1,355	1.0	718	0.6
Urban-outside central city	-	-	749	0.3	268	0.1
Nonurban area	-	-	624	0.3	419	0.2
South	-	-	5,285	0.6	3,193	0.3
Urban-inside central city	-	-	2,700	1.3	1,393	0.6
Urban-outside central city	-	-	1,555	0.4	907	0.2
Nonurban area	-	-	1,030	0.4	893	0.3
West	-	-	3,891	0.9	2,774	0.6
Urban-inside central city	-	-	1,639	1.3	1,296	1.1
Urban-outside central city	-	-	1,897	0.9	1,253	0.5
Nonurban area	-	-	355	0.4	225	0.2

^a Metro status data not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-18. Number and percentage of approved full time equivalent (FTE) teaching positions abolished, withdrawn, or filled by substitute teachers because of budget cutbacks, and the number and percentage of school districts affected, by selected district characteristics: 1993-94

District Characteristic	FTE Positions		Districts Affected	
	Number	Percent	Number	Percent
TOTAL	5,372	0.2	1,342	9.0
District Size				
Under 1,000	846	0.4	563	7.4
1,000 to 9,999	3,017	0.3	719	10.8
10,000 or more	1,510	0.1	61	8.5
Minority Students^a				
Under 10%	2,374	0.3	757	8.4
10% to under 50%	2,025	0.2	375	8.8
50% or more	962	0.1	205	12.7
Minority Teachers				
None	1,074	0.3	515	7.1
More than 0% to under 20%	3,697	0.2	751	11.3
20% or more	601	0.1	75	7.3
Metro Status				
Urban-inside central city	993	0.2	59	10.6
Urban-outside central city	2,758	0.2	588	9.8
Nonurban area	1,621	0.2	694	8.2
Region by Metro Status				
Northeast	942	0.2	293	9.5
Urban-inside central city	266	0.2	16	18.3
Urban-outside central city	516	0.2	192	9.8
Nonurban area	160	0.2	85	8.1
Midwest	1,891	0.3	494	8.7
Urban-inside central city	210	0.2	22	14.3
Urban-outside central city	1,175	0.4	188	9.7
Nonurban area	506	0.3	284	8.0
South	1,038	0.1	217	6.6
Urban-inside central city	255	0.1	11	6.0
Urban-outside central city	264	0.1	41	4.6
Nonurban area	519	0.2	165	7.4
West	1,501	0.3	337	11.5
Urban-inside central city	262	0.2	10	7.7
Urban-outside central city	803	0.3	167	13.8
Nonurban area	436	0.5	160	10.1

a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-19. Number and percentage of school districts that laid off teachers and the number and percentage of full time equivalent (FTE) teachers laid off, by selected district characteristics: 1993-94

District Characteristic	Districts with Teachers Laid Off		Teachers	
	Number of Districts	Percent of All Districts	Number of FTEs Laid Off	Percent of All FTE Teachers
TOTAL	1,996	13.3	11,910	0.5
District Size				
Under 1,000	802	10.5	1,401	0.6
1,000 to 9,999	1,066	16.0	6,131	0.5
10,000 or more	128	18.0	4,378	0.4
Minority Students^a				
Under 10%	1,149	12.7	4,434	0.5
10% to under 50%	614	14.3	5,210	0.5
50% or more	217	13.4	2,219	0.3
Minority Teachers				
None	894	12.3	1,919	0.5
More than 0% to under 20%	963	14.5	8,326	0.5
20% or more	139	13.4	1,665	0.3
Metro Status				
Urban-inside central city	114	20.2	2,688	0.4
Urban-outside central city	840	14.0	6,310	0.5
Nonurban area	1,042	12.4	2,912	0.4
Region by Metro Status				
Northeast	492	15.9	1,999	0.4
Urban-inside central city	22	25.7	539	0.4
Urban-outside central city	317	16.2	1,227	0.4
Nonurban area	152	14.5	234	0.3
Midwest	856	15.1	5,916	1.0
Urban-inside central city	58	37.3	1,231	1.0
Urban-outside central city	374	19.3	3,683	1.3
Nonurban area	423	11.9	1,003	0.5
South	341	10.3	1,697	0.2
Urban-inside central city	18	9.8	226	0.1
Urban-outside central city	78	8.8	435	0.1
Nonurban area	244	11.0	1,035	0.3
West	308	10.5	2,299	0.5
Urban-inside central city	15	11.2	692	0.6
Urban-outside central city	70	5.8	965	0.4
Nonurban area	223	14.0	641	0.7

a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-20. Percentage of school districts using pay incentives to recruit or retain teachers to teach in less desirable locations or in fields of shortage, by selected district characteristics: 1987-88 to 1993-94

District Characteristic	School Year		
	1987-88 Percent	1990-91 Percent	1993-94 Percent
TOTAL	7.5	11.2	14.6
District Size			
Under 1,000	8.4	11.5	14.7
1,000 to 9,999	6.1	10.2	13.7
10,000 or more	10.0	16.6	22.8
Minority Students ^a			
Under 10%	6.6	8.7	10.5
10% to under 50%	7.8	12.0	18.2
50% or more	10.9	24.1	28.0
Minority Teachers			
None	6.7	9.5	11.6
More than 0% to under 20%	8.0	11.0	16.3
20% or more	9.3	23.4	24.8
Metro Status			
Urban-inside central city	-	10.5	24.5
Urban-outside central city	-	10.9	12.9
Nonurban area	-	11.4	15.2
Region by District Size			
Northeast	5.8	8.3	8.4
Under 1,000	6.7	5.7	6.5
1,000 to 9,999	5.0	10.1	9.4
10,000 or more	9.6	12.0	16.4
Midwest	6.6	7.9	11.6
Under 1,000	7.8	8.5	13.3
1,000 to 9,999	4.7	7.1	8.9
10,000 or more	6.6	6.8	12.1
South	11.4	17.8	25.5
Under 1,000	14.5	22.6	32.1
1,000 to 9,999	8.9	13.0	19.9
10,000 or more	10.7	20.7	26.8
West	6.2	13.0	14.8
Under 1,000	5.6	12.6	9.4
1,000 to 9,999	6.3	12.9	22.2
10,000 or more	11.1	17.5	24.8

- Metro status data not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-21. Percentage of school districts using pay incentives to recruit or retain teachers to teach in less desirable locations by type of pay incentive, by selected district characteristics: 1993-94

District Characteristic	Any Incentive	Cash Bonus	Type of Pay Incentive	
			Salary Step Increase	Other Salary Increase
TOTAL	9.9	2.1	5.4	3.6
District Size				
Under 1,000	11.3	1.9	6.2	4.5
1,000 to 9,999	8.4	2.2	4.6	2.6
10,000 or more	9.4	3.7	3.3	3.3
Minority Students^a				
Under 10%	7.2	0.7	5.5	1.8
10% to under 50%	12.8	3.5	4.5	6.3
50% or more	17.3	6.5	6.9	5.9
Minority Teachers				
None	8.4	1.2	5.5	2.6
More than 0% to under 20%	10.7	2.7	5.1	4.2
20% or more	14.8	5.3	6.4	6.3
Metro Status				
Urban-inside central city	11.0	2.2	6.5	3.6
Urban-outside central city	8.0	2.2	4.6	1.7
Nonurban area	11.2	2.1	5.8	4.9
Region by District Size				
Northeast	5.1	0.5	4.2	0.6
Under 1,000	5.0	0.3	4.6	0.4
1,000 to 9,999	5.2	0.7	4.0	0.8
10,000 or more	0.0	0.0	0.0	0.0
Midwest	7.4	0.7	6.2	1.4
Under 1,000	9.2	0.8	7.6	1.9
1,000 to 9,999	5.0	0.6	4.3	0.7
10,000 or more	3.3	0.0	3.3	0.8
South	18.9	6.1	4.9	10.9
Under 1,000	26.1	8.2	4.7	17.0
1,000 to 9,999	14.4	4.3	5.4	7.4
10,000 or more	12.3	6.8	3.4	3.4
West	9.6	2.1	5.5	2.4
Under 1,000	8.4	0.4	5.9	2.5
1,000 to 9,999	11.7	5.0	5.1	1.6
10,000 or more	10.7	2.4	4.0	5.2

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-22. Percentage of school districts using pay incentives to recruit or retain teachers to teach in fields of shortage by type of pay incentive, by selected district characteristics: 1993-94

District Characteristic	Any Incentive	Cash Bonus	Type of Pay Incentive	
			Salary Step Increase	Other Salary Increase
TOTAL	10.2	1.8	4.8	4.2
District Size				
Under 1,000	8.9	1.0	4.6	3.9
1,000 to 9,999	10.7	2.2	4.9	4.1
10,000 or more	19.9	8.0	5.8	7.9
Minority Students^a				
Under 10%	7.3	0.5	5.0	2.3
10% to under 50%	11.7	2.6	4.4	5.4
50% or more	23.1	7.7	4.6	11.7
Minority Teachers				
None	7.6	0.7	4.9	2.4
More than 0% to under 20%	11.7	2.4	4.8	5.2
20% or more	19.1	6.2	4.3	9.9
Metro Status				
Urban-inside central city	20.1	5.9	7.1	8.3
Urban-outside central city	9.9	2.3	5.3	2.7
Nonurban area	9.8	1.2	4.3	5.0
Region by District Size				
Northeast	6.0	0.2	5.1	1.0
Under 1,000	5.1	0.0	4.5	0.6
1,000 to 9,999	6.4	0.3	5.2	1.1
10,000 or more	16.4	2.1	12.3	4.3
Midwest	8.3	0.4	6.2	2.2
Under 1,000	8.5	0.2	6.4	2.6
1,000 to 9,999	7.8	0.7	5.8	1.6
10,000 or more	10.4	1.6	7.0	2.6
South	16.8	4.9	2.4	10.4
Under 1,000	18.4	4.3	1.5	13.1
1,000 to 9,999	14.3	4.0	2.8	8.3
10,000 or more	23.5	12.1	4.2	10.1
West	11.0	2.8	4.5	4.3
Under 1,000	5.2	0.5	3.6	1.8
1,000 to 9,999	19.3	5.9	5.8	8.0
10,000 or more	20.8	7.2	5.9	8.5

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-23. Percentage of school districts using pay incentives to recruit or retain teachers to fields of shortage by subject matter, by selected district characteristics: 1993-94

District Characteristic	Special Education	Subject Matter								
		Math	Comp. Sci.	Physical Science	Biological Sciences	Bilingual Education	Foreign Language	Vocational Education	Other	
TOTAL	6.2	3.2	1.7	2.7	2.8	3.2	2.0	2.5	1.1	
District Size										
Under 1,000	5.0	4.0	1.7	3.0	3.4	1.6	2.0	2.7	1.0	
1,000 to 9,999	6.8	2.3	1.8	2.4	2.2	4.3	2.2	2.4	1.3	
10,000 or more	12.8	2.8	0.6	2.1	2.2	9.9	1.0	2.5	1.3	
Minority Students^a										
Under 10%	4.5	2.2	1.3	2.1	2.2	1.0	1.7	2.1	1.0	
10% to under 50%	7.1	3.8	2.2	3.0	3.2	4.3	2.4	3.1	1.3	
50% or more	13.0	7.5	2.2	5.7	5.5	12.4	3.3	3.6	1.1	
Minority Teachers										
None	4.2	3.1	1.4	2.4	2.9	1.2	2.1	2.3	1.0	
More than 0% to under 20%	7.4	3.2	1.9	3.0	2.6	4.3	1.8	2.6	1.2	
20% or more	11.7	3.9	1.6	3.2	3.5	10.0	3.3	3.8	1.3	
Metro Status										
Urban-inside central city	16.2	3.3	1.3	2.9	3.0	11.0	1.2	3.0	1.1	
Urban-outside central city	5.8	2.4	1.3	2.0	1.8	3.8	1.6	2.3	0.7	
Nonurban area	5.7	3.8	2.0	3.2	3.6	2.2	2.4	2.7	1.4	
Region by District Size										
Northeast	3.7	1.8	0.8	1.7	1.0	0.9	0.4	0.8	0.7	
Under 1,000	3.2	3.1	0.2	0.9	0.2	0.7	0.0	0.5	0.5	
1,000 to 9,999	3.9	0.9	1.3	2.2	1.4	1.0	0.6	1.0	0.8	
10,000 or more	9.9	2.2	0.0	2.2	2.2	4.3	0.0	4.3	2.2	
Midwest	4.8	2.5	1.6	2.4	2.3	1.4	2.5	2.4	1.5	
Under 1,000	4.5	2.7	1.7	2.6	2.6	1.3	2.8	2.7	1.3	
1,000 to 9,999	5.1	2.4	1.5	2.0	1.9	1.6	2.3	2.1	1.8	
10,000 or more	7.7	1.1	0.0	1.1	1.1	0.0	0.0	1.6	0.8	
South	10.6	7.0	3.0	5.4	6.3	5.5	2.9	5.3	0.9	
Under 1,000	9.3	11.0	3.5	7.8	10.1	3.3	2.9	6.2	0.6	
1,000 to 9,999	10.1	4.1	2.9	3.9	3.7	6.0	3.3	4.8	1.0	
10,000 or more	18.6	5.0	1.1	3.4	3.7	12.2	0.8	3.6	2.0	
West	6.3	1.8	1.2	1.5	1.9	6.4	1.9	1.4	1.1	
Under 1,000	3.8	2.0	1.4	1.6	2.1	1.5	1.2	1.5	1.0	
1,000 to 9,999	10.5	1.6	1.2	1.6	1.7	13.7	2.9	1.4	1.3	
10,000 or more	8.6	0.9	0.5	0.9	0.9	13.4	2.1	1.3	0.5	

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-24. Percentage of school districts in which free training is offered to prepare staff members to teach in fields with current or anticipated shortages, by selected district characteristics: 1987-88 to 1993-94

District Characteristic	<u>School Year</u>		
	1987-88 Percent	1990-91 Percent	1993-94 Percent
TOTAL	11.7	10.3	19.0
District Size			
Under 1,000	9.9	7.9	17.5
1,000 to 9,999	12.8	11.7	19.1
10,000 or more	22.9	28.1	34.5
Minority Students ^a			
Under 10%	8.6	7.4	15.0
10% to under 50%	13.7	14.3	20.7
50% or more	24.4	19.6	37.3
Minority Teachers			
None	8.7	6.3	14.4
More than 0% to under 20%	11.8	12.8	21.2
20% or more	28.7	24.0	38.0
Metro Status			
Urban-inside central city	-	16.1	28.5
Urban-outside central city	-	10.0	17.5
Nonurban area	-	10.1	19.5
Region by District Size			
Northeast	9.4	7.8	13.5
Under 1,000	9.3	6.7	14.1
1,000 to 9,999	9.3	8.4	12.9
10,000 or more	17.0	15.5	25.3
Midwest	7.2	4.7	13.1
Under 1,000	7.3	5.7	15.4
1,000 to 9,999	6.9	2.8	9.7
10,000 or more	8.4	8.7	13.2
South	18.8	19.8	26.6
Under 1,000	10.1	13.0	21.9
1,000 to 9,999	23.9	23.5	28.5
10,000 or more	32.2	33.2	37.1
West	15.0	13.3	27.7
Under 1,000	15.6	8.9	20.6
1,000 to 9,999	12.9	18.2	36.6
10,000 or more	19.1	34.5	44.4

^a Metro status data not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-25. Percentage of school districts in which free training is offered to prepare staff members to teach in fields of current or anticipated shortage by subject matter, by selected district characteristics: 1993-94

District Characteristic	Subject Matter								
	Special Education	Math	Comp. Sci.	Physical Science	Biological Sciences	Bilingual Education	Foreign Language	Vocational Education	Other
TOTAL	12.2	11.3	9.5	9.1	9.1	10.1	6.1	6.6	0.9
District Size									
Under 1,000	12.0	11.7	10.2	9.3	9.5	8.9	6.2	7.4	..
1,000 to 9,999	11.6	10.7	8.6	8.8	8.6	10.2	5.7	5.6	0.6
10,000 or more	18.6	12.2	11.0	10.0	10.0	23.1	9.2	7.6	..
Minority Students^a									
Under 10%	10.5	10.1	9.0	8.1	8.0	6.1	5.8	6.5	..
10% to under 50%	13.6	11.0	9.6	9.0	9.1	12.6	6.4	6.4	..
50% or more	17.4	18.7	12.4	15.5	16.1	26.4	7.4	8.2	..
Minority Teachers									
None	10.2	9.5	8.7	7.9	8.0	6.1	5.9	6.5	..
More than 0% to under 20%	12.7	11.9	9.8	9.7	9.4	13.0	6.1	6.4	..
20% or more	22.4	19.4	14.3	14.4	15.7	19.7	7.4	9.4	..
Metro Status									
Urban-inside central city	14.3	7.7	8.3	6.9	7.5	20.3	5.8	7.5	..
Urban-outside central city	8.9	9.3	7.7	6.8	6.5	10.6	4.1	4.1	..
Nonurban area	14.4	12.9	11.0	10.9	11.1	9.1	7.6	8.4	..
Region by District Size									
Northeast	9.2	9.3	9.0	6.5	5.9	5.9	4.5	4.7	..
Under 1,000	9.2	..	..	..	..	..	..	..	..
1,000 to 9,999	9.1	8.7	8.5	7.2	6.4	6.2	5.0	4.8	..
10,000 or more	..	..	..	..	..	..	..	..	..
Midwest	8.5	8.7	7.8	7.6	7.6	5.4	6.0	6.5	..
Under 1,000	9.6	9.9	9.4	8.7	8.9	..	7.0	7.9	..
1,000 to 9,999	6.8	6.9	5.6	6.0	5.9	..	..	4.5	..
10,000 or more	9.0	..	..	..	..	..	..	..	..
South	19.3	15.2	11.2	12.4	12.9	13.4	8.3	9.0	..
Under 1,000	17.9	14.7	13.6	11.9	12.0	15.3	..	10.9	..
1,000 to 9,999	19.0	15.5	9.3	12.7	13.6	10.8	7.3	7.5	..
10,000 or more	27.4	15.3	11.1	13.0	13.0	19.4	10.4	9.0	..
West	14.2	13.9	11.6	11.1	11.2	20.1	5.7	6.1	..
Under 1,000	14.0	13.9	9.8	11.3	12.0	..	..	5.9	..
1,000 to 9,999	14.9	14.5	14.6	11.5	10.4	30.8	7.3	6.5	..
10,000 or more	13.4	11.4	12.5	8.4	7.9	39.1	10.6	..	..

.. Too few cases for a reliable estimate.

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-26. Average low and high salary for full time teachers in actual and in constant 1993-94 dollars, by selected district characteristics: 1990-91 to 1993-94^a

District Characteristic	School Year					
	1990-91		1990-91		1993-94	
	Actual Low	Actual High	Constant Low	Constant High	Actual Low	Actual High
TOTAL	19,770	35,415	21,586	38,669	21,817	39,847
District Size						
Under 1,000	18,814	31,581	20,542	34,482	20,689	35,448
1,000 to 9,999	20,809	39,673	22,721	43,318	22,960	44,278
10,000 or more	21,837	42,876	23,843	46,815	23,223	45,599
Minority Students ^c						
Under 10%	19,272	34,325	21,043	37,478	21,324	38,601
10% to under 50%	20,570	37,428	22,460	40,866	22,501	42,063
50% or more	20,943	37,441	22,867	40,880	22,777	40,930
Minority Teachers						
None	18,879	32,331	20,614	35,301	20,749	36,335
More than 0% to under 20%	20,787	39,136	22,697	42,731	22,981	43,893
20% or more	20,281	36,113	22,144	39,430	21,855	38,598
Metro Status						
Urban-inside central city	21,869	40,602	23,878	44,331	23,491	44,584
Urban-outside central city	21,446	41,290	23,416	45,083	23,786	46,634
Nonurban area	18,524	31,214	20,225	34,082	20,302	34,695
Region by Metro Status						
Northeast	22,467	43,791	24,530	47,814	25,467	50,793
Urban-inside central city	23,115	45,089	25,238	49,230	26,578	52,318
Urban-outside central city	23,455	47,235	25,610	51,574	26,905	55,083
Nonurban area	20,664	37,602	22,562	41,056	22,697	42,672
Midwest	18,505	32,455	20,204	35,437	20,644	37,061
Urban-inside central city	20,705	41,907	22,607	45,757	23,260	47,165
Urban-outside central city	20,041	39,355	21,882	42,971	22,338	44,453
Nonurban area	17,678	28,760	19,302	31,402	19,605	32,585
South	18,896	31,342	20,631	34,221	20,416	33,870
Urban-inside central city	20,268	35,271	22,129	38,511	21,775	37,592
Urban-outside central city	19,300	32,842	21,073	35,859	20,884	35,641
Nonurban area	18,640	30,481	20,352	33,281	20,114	32,845
West	20,457	37,193	22,337	40,609	21,804	40,406
Urban-inside central city	23,237	41,821	25,371	45,663	24,178	46,334
Urban-outside central city	22,031	41,022	24,055	44,790	23,208	44,595
Nonurban area	18,943	33,828	20,683	36,935	20,539	36,728

a) In districts with salary schedules, the low salary corresponds to bachelor's degree with no teaching experience and high is equivalent to maximum scheduled salary. Districts without salary schedule reported their lowest and highest base salaries for the year.

b) Adjusted using the Consumer Price Index.

c) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-27. Average scheduled salary for teachers (in constant 1993-94 dollars) by education and teaching experience for school districts with salary schedules, by selected district characteristics: 1990-91 and 1993-94

District Characteristic	1990-91 (Constant 1993-94 Dollars) ^a			1993-94 (Actual Dollars)		
	Bachelor's without Experience	Master's without Experience	Master's with 20 yrs Experience	Bachelor's without Experience	Master's without Experience	Master's with 20 yrs Experience
TOTAL	21,742	23,691	36,249	21,923	23,956	37,213
District Size						
Under 1,000	20,747	22,546	33,364	20,817	22,777	34,360
1,000 to 9,999	22,714	24,802	39,185	22,940	25,042	39,934
10,000 or more	23,834	26,163	41,194	23,212	25,327	39,657
Minority Students^b						
Under 10%	21,231	23,177	35,461	21,498	23,597	36,655
10% to under 50%	22,522	24,485	37,754	22,445	24,361	38,246
50% or more	22,935	24,877	37,419	22,784	24,784	37,378
Minority Teachers						
None	20,829	22,662	34,226	20,875	22,882	35,043
More than 0% to under 20%	22,714	24,793	38,717	22,979	25,090	39,810
20% or more	22,139	24,097	35,412	21,827	23,533	34,394
Metro Status						
Urban-inside central city	23,867	25,521	40,827	23,476	25,328	39,857
Urban-outside central city	23,446	25,549	40,927	23,781	26,060	42,680
Nonurban area	20,384	22,250	32,624	20,389	22,247	32,839
Region by Metro Status						
Northeast	24,604	26,617	43,453	25,581	27,727	46,594
Urban-inside central city	25,195	27,170	43,749	26,580	28,660	47,666
Urban-outside central city	25,706	27,844	46,197	26,918	29,272	50,299
Nonurban area	22,516	24,302	38,366	22,693	24,406	38,739
Midwest	20,478	22,490	34,287	20,879	23,013	35,718
Urban-inside central city	22,607	24,844	41,070	23,262	25,633	42,471
Urban-outside central city	21,917	24,087	39,323	22,415	24,729	41,229
Nonurban area	19,601	21,517	31,245	19,822	21,835	32,017
South	20,639	22,006	31,556	20,407	21,714	30,955
Urban-inside central city	22,109	23,320	35,634	21,718	22,901	33,999
Urban-outside central city	21,081	22,544	32,913	20,879	22,177	32,256
Nonurban area	20,359	21,701	30,729	20,108	21,427	30,175
West	22,458	24,895	38,006	21,913	24,505	37,800
Urban-inside central city	25,371	26,854	43,224	24,263	26,299	40,139
Urban-outside central city	24,068	26,493	41,125	23,219	26,055	40,874
Nonurban area	20,767	23,371	34,800	20,616	23,057	35,039

a) Adjusted using the Consumer Price Index.

b) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-28. Number and percentage of school districts with collective bargaining units, by selected district characteristics: 1993-94

District Characteristic	Number	Percent
TOTAL	9,586	64.0
District Size		
Under 1,000	4,391	57.6
1,000 to 9,999	4,746	71.3
10,000 or more	450	63.5
Minority Students ^a		
Under 10%	6,514	72.0
10% to under 50%	2,356	55.0
50% or more	679	42.1
Minority Teachers		
None	4,901	67.2
More than 0% to under 20%	4,366	65.6
20% or more	319	30.7
Metro Status		
Urban-inside central city	392	69.9
Urban-outside central city	4,721	78.6
Nonurban area	4,473	53.1
Region by Metro Status		
Northeast	3,037	98.1
Urban-inside central city	83	97.9
Urban-outside central city	1,939	99.0
Nonurban area	1,014	96.6
Midwest	4,168	73.7
Urban-inside central city	147	93.9
Urban-outside central city	1,670	86.1
Nonurban area	2,351	66.1
South	392	11.9
Urban-inside central city	34	18.2
Urban-outside central city	160	17.9
Nonurban area	198	8.9
West	1,990	67.8
Urban-inside central city	128	95.6
Urban-outside central city	952	78.8
Nonurban area	910	57.2

a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-29. Average scheduled salary for teachers by education and teaching experience in school districts with and without collective bargaining units, by selected district characteristics: 1993-94

District Characteristic	With Collective Bargaining Units			Without Collective Bargaining Units		
	Bachelor's without Experience	Master's without Experience	Master's with 20 yrs Experience	Bachelor's without Experience	Master's without Experience	Master's with 20 yrs Experience
TOTAL	22,850	25,115	40,375	20,127	21,712	31,088
District Size						
Under 1,000	21,560	23,838	37,204	19,642	21,097	29,859
1,000 to 9,999	23,906	26,146	43,033	20,565	22,325	32,310
10,000 or more	23,963	26,360	42,480	21,908	23,534	34,758
Minority Students^a						
Under 10%	22,144	24,328	38,807	19,472	21,306	29,911
10% to under 50%	24,157	26,603	43,873	20,335	21,598	31,311
50% or more	25,032	27,459	43,099	21,140	22,827	33,193
Minority Teachers						
None	21,529	23,683	37,312	19,197	20,825	29,220
More than 0% to under 20%	24,200	26,600	43,648	20,657	22,219	32,514
20% or more	24,111	26,184	41,359	20,829	22,375	31,353
Metro Status						
Urban-inside central city	24,208	26,356	42,009	21,754	22,909	34,790
Urban-outside central city	24,486	26,904	45,034	21,192	22,958	34,033
Nonurban area	20,969	23,079	35,221	19,652	21,190	29,811
Region by Metro Status						
Northeast	25,623	27,765	46,715	22,996	25,386	39,105
Urban-inside central city	26,670	28,759	47,922	--	--	--
Urban-outside central city	26,921	29,264	50,306	--	--	--
Nonurban area	22,764	24,483	38,960	--	--	--
Midwest	21,376	23,620	37,556	18,911	20,612	28,452
Urban-inside central city	23,331	25,743	42,557	--	--	--
Urban-outside central city	22,688	25,045	42,340	20,636	22,674	34,005
Nonurban area	20,326	22,480	33,862	18,318	19,910	26,516
South	21,752	23,362	32,146	20,226	21,491	30,795
Urban-inside central city	21,762	23,223	32,151	21,708	22,829	34,415
Urban-outside central city	21,946	23,568	33,634	20,646	21,874	31,956
Nonurban area	21,593	23,219	30,936	19,962	21,252	30,101
West	22,210	24,824	38,899	21,185	23,725	35,110
Urban-inside central city	24,321	26,385	40,300	--	--	--
Urban-outside central city	23,287	26,094	41,358	22,956	25,908	39,011
Nonurban area	20,759	23,246	36,076	20,386	22,753	33,371

-- Too few cases for a reliable estimate.

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-30. Number and percentage of school districts offering retirement plans to teachers, by selected district characteristics: 1987-88 to 1993-94

District Characteristic	School Year					
	1987-88		1990-91		1993-94	
	Number	Percent	Number	Percent	Number	Percent
TOTAL	15,035	98.6	15,315	98.7	14,826	98.9
District Size						
Under 1,000	7,776	97.8	8,274	98.2	7,491	98.2
1,000 to 9,999	6,624	99.5	6,365	99.4	6,627	99.6
10,000 or more	636	99.8	676	99.8	708	100.0
Minority Students^a						
Under 10%	9,686	98.2	9,926	99.2	8,906	98.4
10% to under 50%	3,364	99.2	3,925	99.5	4,267	99.6
50% or more	1,904	99.7	1,436	93.9	1,608	99.8
Minority Teachers						
None	7,694	97.9	7,812	98.1	7,177	98.4
More than 0% to under 20%	5,972	99.3	6,340	99.4	6,613	99.4
20% or more	1,370	99.7	1,163	99.6	1,036	99.7
Metro Status						
Urban-inside central city	-	-	604	88.3	561	100.0
Urban-outside central city	-	-	5,799	99.5	5,961	99.3
Nonurban area	-	-	8,912	99.0	8,305	98.6
Region by Metro Status						
Northeast	-	-	3,091	99.7	3,062	99.0
Urban-inside central city	-	-	101	100.0	85	100.0
Urban-outside central city	-	-	1,906	99.5	1,944	99.2
Nonurban area	-	-	1,084	99.8	1,033	98.4
Midwest	-	-	5,869	99.1	5,548	98.2
Urban-inside central city	-	-	152	99.0	157	100.0
Urban-outside central city	-	-	1,854	98.9	1,913	98.7
Nonurban area	-	-	3,863	99.2	3,478	97.8
South	-	-	3,387	99.2	3,302	99.9
Urban-inside central city	-	-	180	100.0	185	100.0
Urban-outside central city	-	-	881	100.0	896	100.0
Nonurban area	-	-	2,327	98.8	2,220	99.8
West	-	-	2,968	96.6	2,914	99.3
Urban-inside central city	-	-	171	68.5	134	100.0
Urban-outside central city	-	-	1,159	99.9	1,208	99.9
Nonurban area	-	-	1,638	98.5	1,573	98.8

^a Metro status data not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-31. Percentage of school districts with retirement plans that permit teachers full or partial credit for teaching experience obtained in another school district **within-state** and **outside-the-state**, by selected district characteristics: 1993-94

District Characteristic	<u>Within-State</u>		<u>Outside-the-State</u>	
	Full Credit	Partial Credit	Full Credit	Partial Credit
TOTAL	96.2	2.4	42.5	23.4
District Size				
Under 1,000	96.2	2.2	43.5	24.8
1,000 to 9,999	96.0	2.7	42.1	22.1
10,000 or more	96.7	--	35.5	19.8
Minority Students^a				
Under 10%	95.3	2.9	44.4	24.0
10% to under 50%	97.1	--	41.2	23.4
50% or more	98.0	--	35.3	19.4
Minority Teachers				
None	95.5	3.0	43.5	24.7
More than 0% to under 20%	96.6	1.8	41.8	21.9
20% or more	98.0	--	40.1	23.3
Metro Status				
Urban-inside central city	98.2	--	41.1	21.0
Urban-outside central city	96.9	1.8	43.3	21.2
Nonurban area	95.4	2.9	42.0	25.0
Region by Metro Status				
Northeast	97.8	--	53.8	20.4
Urban-inside central city	100.0	0.0	56.2	21.3
Urban-outside central city	97.5	--	54.7	21.8
Nonurban area	98.2	--	51.7	17.6
Midwest	93.6	3.9	41.2	26.4
Urban-inside central city	96.6	--	50.2	26.8
Urban-outside central city	94.9	--	46.4	26.3
Nonurban area	92.7	4.8	37.9	26.5
South	99.0	--	52.6	24.3
Urban-inside central city	99.4	--	51.1	25.7
Urban-outside central city	99.3	--	48.6	24.4
Nonurban area	98.8	--	54.4	24.2
West	96.1	2.5	21.6	19.5
Urban-inside central city	97.5	--	7.1	7.6
Urban-outside central city	97.6	--	15.8	9.8
Nonurban area	94.9	3.0	27.4	28.0

-- Too few cases for a reliable estimate.

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-32. Number and percentage of school districts allowing teachers to purchase credit toward retirement plan for experience obtained in other school districts **within-state** and **outside-the-state**, by selected district characteristics: 1993-94

District Characteristic	<u>Within-State</u>		<u>Outside-the-State</u>	
	Number	Percent	Number	Percent
TOTAL	1,324	9.1	7,936	81.3
District Size				
Under 1,000	757	10.3	4,016	78.5
1,000 to 9,999	510	7.8	3,576	84.1
10,000 or more	58	8.3	344	87.6
Minority Students^a				
Under 10%	749	8.6	4,906	80.6
10% to under 50%	428	10.1	2,307	83.7
50% or more	141	8.8	698	79.3
Minority Teachers				
None	596	8.4	3,869	79.0
More than 0% to under 20%	593	9.1	3,525	83.7
20% or more	136	13.2	542	82.5
Metro Status				
Urban-inside central city	50	9.0	318	91.3
Urban-outside central city	519	8.8	3,205	83.4
Nonurban area	755	9.2	4,412	79.2
Region by Metro Status				
Northeast	305	10.1	1,961	86.4
Urban-inside central city	12	14.1	56	84.8
Urban-outside central city	194	10.0	1,293	86.9
Nonurban area	99	9.7	612	85.4
Midwest	447	8.3	2,905	77.4
Urban-inside central city	12	8.0	114	94.8
Urban-outside central city	132	7.1	1,137	81.8
Nonurban area	302	8.9	1,653	73.8
South	347	10.5	2,163	85.2
Urban-inside central city	4	2.2	131	92.3
Urban-outside central city	96	10.7	554	84.6
Nonurban area	246	11.1	1,478	84.8
West	226	7.9	907	75.6
Urban-inside central city	22	16.1	16	83.4
Urban-outside central city	97	8.1	221	71.4
Nonurban area	108	7.0	670	76.9

a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-33. Average number of years of credit required in English, mathematics, social science, physical/biological science, computer science, and foreign language for high school graduation in school districts with 4-year programs, by selected district characteristics: 1990-91 to 1993-94

District Characteristic	School Year	
	1990-91 Number of Years	1993-94 Number of Years
TOTAL	11.8	12.1
District Size		
Under 1,000	11.8	12.2
1,000 to 9,999	11.9	12.1
10,000 or more	11.8	12.0
Minority Students^a		
Under 10%	11.7	11.9
10% to under 50%	12.0	12.4
50% or more	12.3	12.8
Minority Teachers		
None	11.7	11.9
More than 0% to under 20%	11.9	12.2
20% or more	12.2	12.8
Metro Status		
Urban-inside central city	12.0	12.0
Urban-outside central city	11.9	12.1
Nonurban area	11.8	12.1
Region by Metro Status		
Northeast	12.9	13.1
Urban-inside central city	12.2	12.1
Urban-outside central city	12.9	13.1
Nonurban area	12.9	13.2
Midwest	11.1	11.2
Urban-inside central city	11.0	11.0
Urban-outside central city	10.8	11.0
Nonurban area	11.2	11.3
South	12.2	12.7
Urban-inside central city	12.9	12.7
Urban-outside central city	12.2	12.6
Nonurban area	12.1	12.8
West	11.8	12.0
Urban-inside central city	11.3	11.8
Urban-outside central city	11.6	11.8
Nonurban area	12.0	12.1

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-34. Average number of years of English required for high school graduation in school districts with 4-year programs, by selected district characteristics: 1987-88 to 1993-94

District Characteristic	School Year		
	1987-88 Number of Years	1990-91 Number of Years	1993-94 Number of Years
TOTAL	3.8	3.8	3.9
District Size			
Under 1,000	3.7	3.8	3.8
1,000 to 9,999	3.8	3.8	3.9
10,000 or more	3.8	3.8	3.9
Minority Students^a			
Under 10%	3.7	3.8	3.8
10% to under 50%	3.8	3.9	3.9
50% or more	3.9	3.9	3.9
Minority Teachers			
None	3.7	3.7	3.8
More than 0% to under 20%	3.8	3.8	3.9
20% or more	3.9	3.9	3.9
Metro Status			
Urban-inside central city	-	3.8	3.9
Urban-outside central city	-	3.8	3.8
Nonurban area	-	3.8	3.9
Region by Metro Status			
Northeast			
Urban-inside central city	-	4.0	3.9
Urban-outside central city	-	3.9	4.0
Nonurban area	-	3.9	4.0
Midwest			
Urban-inside central city	-	3.8	3.7
Urban-outside central city	-	3.6	3.7
Nonurban area	-	3.6	3.7
South			
Urban-inside central city	-	4.0	4.0
Urban-outside central city	-	4.0	4.0
Nonurban area	-	3.9	4.0
West			
Urban-inside central city	-	3.5	3.7
Urban-outside central city	-	3.7	3.7
Nonurban area	-	3.9	3.9

^a Metro status data not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-35. Average number of years of mathematics required for high school graduation in school districts with 4-year programs, by selected district characteristics: 1987-88 to 1993-94

District Characteristic	School Year		
	1987-88 Number of Years	1990-91 Number of Years	1993-94 Number of Years
TOTAL	2.4	2.4	2.5
District Size			
Under 1,000	2.4	2.4	2.5
1,000 to 9,999	2.4	2.5	2.5
10,000 or more	2.4	2.5	2.5
Minority Students^a			
Under 10%	2.3	2.4	2.4
10% to under 50%	2.5	2.5	2.6
50% or more	2.6	2.6	2.7
Minority Teachers			
None	2.3	2.4	2.4
More than 0% to under 20%	2.4	2.5	2.5
20% or more	2.6	2.6	2.7
Metro Status			
Urban-inside central city	-	2.5	2.5
Urban-outside central city	-	2.4	2.5
Nonurban area	-	2.4	2.5
Region by Metro Status			
Northeast	-	2.6	2.7
Urban-inside central city	-	2.5	2.7
Urban-outside central city	-	2.6	2.7
Nonurban area	-	2.5	2.6
Midwest	-	2.2	2.3
Urban-inside central city	-	2.2	2.1
Urban-outside central city	-	2.2	2.2
Nonurban area	-	2.2	2.3
South	-	2.7	2.8
Urban-inside central city	-	2.9	2.9
Urban-outside central city	-	2.7	2.8
Nonurban area	-	2.6	2.8
West	-	2.4	2.3
Urban-inside central city	-	2.4	2.2
Urban-outside central city	-	2.3	2.3
Nonurban area	-	2.4	2.4

^a Metro status data not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-36. Average number of years of social science required for high school graduation in school districts with 4-year programs, by selected district characteristics: 1987-88 to 1993-94

District Characteristic	School Year		
	1987-88 Number of Years	1990-91 Number of Years	1993-94 Number of Years
TOTAL	2.8	2.9	3.0
District Size			
Under 1,000	2.8	2.8	2.9
1,000 to 9,999	2.8	2.9	3.0
10,000 or more	2.8	2.9	3.0
Minority Students^a			
Under 10%	2.8	2.9	3.0
10% to under 50%	2.8	2.9	2.9
50% or more	2.9	2.9	3.1
Minority Teachers			
None	2.8	2.9	3.0
More than 0% to under 20%	2.8	2.9	3.0
20% or more	2.8	2.8	3.0
Metro Status			
Urban-inside central city	-	2.9	2.9
Urban-outside central city	-	2.9	3.1
Nonurban area	-	2.8	2.9
Region by Metro Status			
Northeast			
Urban-inside central city	-	3.3	3.3
Urban-outside central city	-	2.9	2.9
Nonurban area	-	3.3	3.4
South	-	3.3	3.3
Urban-inside central city	-	2.8	2.8
Urban-outside central city	-	2.8	2.8
Nonurban area	-	2.7	2.8
Midwest	-	2.8	2.8
Urban-inside central city	-	2.8	2.8
Urban-outside central city	-	2.7	2.8
Nonurban area	-	2.8	2.9
West	-	2.7	2.8
Urban-inside central city	-	3.0	3.0
Urban-outside central city	-	2.7	2.9
Nonurban area	-	2.7	2.8

^a Metro status data not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-37. Average number of years of physical and biological sciences required for high school graduation in school districts with 4-year programs, by selected district characteristics: 1987-88 to 1993-94

District Characteristic	School Year		
	1987-88 Number of Years	1990-91 Number of Years	1993-94 Number of Years
TOTAL	2.0	2.1	2.2
District Size			
Under 1,000	2.1	2.1	2.2
1,000 to 9,999	2.0	2.1	2.2
10,000 or more	2.1	2.1	2.2
Minority Students^a			
Under 10%	2.0	2.1	2.2
10% to under 50%	2.1	2.2	2.2
50% or more	2.2	2.2	2.3
Minority Teachers			
None	2.0	2.1	2.2
More than 0% to under 20%	2.0	2.1	2.2
20% or more	2.2	2.2	2.4
Metro Status			
Urban-inside central city	-	2.1	2.1
Urban-outside central city	-	2.1	2.2
Nonurban area	-	2.2	2.2
Region by Metro Status			
Northeast	-	2.3	2.3
Urban-inside central city	-	2.2	2.1
Urban-outside central city	-	2.3	2.3
Nonurban area	-	2.3	2.3
Midwest	-	2.0	2.0
Urban-inside central city	-	1.9	2.0
Urban-outside central city	-	1.9	1.9
Nonurban area	-	2.0	2.1
South	-	2.2	2.4
Urban-inside central city	-	2.3	2.3
Urban-outside central city	-	2.2	2.3
Nonurban area	-	2.3	2.4
West	-	2.1	2.1
Urban-inside central city	-	2.0	2.1
Urban-outside central city	-	1.9	2.1
Nonurban area	-	2.2	2.2

- Metro status data not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-38. Percentage of school districts with high school graduation requirements in computer science, by selected district characteristics: 1990-91 to 1993-94

District Characteristic	School Year	
	1990-91 Percent of Districts	1993-94 Percent of Districts
TOTAL	33.0	36.5
District Size		
Under 1,000	40.3	45.9
1,000 to 9,999	27.4	31.3
10,000 or more	25.9	20.3
Minority Students^a		
Under 10%	32.9	37.2
10% to under 50%	31.8	35.5
50% or more	36.9	35.5
Minority Teachers		
None	35.9	39.8
More than 0% to under 20%	29.3	34.0
20% or more	37.3	33.8
Metro Status		
Urban-inside central city	30.5	28.1
Urban-outside central city	27.5	30.2
Nonurban area	36.4	41.3
Region by Metro Status		
Northeast	28.4	32.1
Urban-inside central city	20.5	21.6
Urban-outside central city	25.3	24.8
Nonurban area	35.5	48.6
Midwest	35.5	37.1
Urban-inside central city	32.0	44.3
Urban-outside central city	28.6	33.3
Nonurban area	39.1	38.8
South	33.7	39.0
Urban-inside central city	39.7	21.0
Urban-outside central city	29.5	37.3
Nonurban area	34.7	41.1
West	30.8	36.3
Urban-inside central city	19.7	22.5
Urban-outside central city	27.3	24.6
Nonurban area	33.1	43.6

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-39. Percentage of school districts with graduation requirements in foreign language in school districts with 4-year programs, by selected district characteristics: 1987-88 to 1993-94

District Characteristic	School Year		
	1987-88 Percent of Districts	1990-91 Percent of Districts	1993-94 Percent of Districts
TOTAL	14.2	18.8	17.6
District Size			
Under 1,000	13.1	19.4	16.6
1,000 to 9,999	14.3	17.7	17.9
10,000 or more	22.3	23.6	21.4
Minority Students^a			
Under 10%	12.2	16.8	13.3
10% to under 50%	16.7	20.8	22.2
50% or more	20.1	26.0	28.7
Minority Teachers			
None	12.1	16.4	13.4
More than 0% to under 20%	15.2	20.1	19.7
20% or more	19.6	24.7	28.7
Metro Status			
Urban-inside central city	-	22.9	19.2
Urban-outside central city	-	20.3	19.2
Nonurban area	-	17.5	16.4
Region by Metro Status			
Northeast	-	29.9	29.1
Urban-inside central city	-	17.8	19.5
Urban-outside central city	-	28.7	27.8
Nonurban area	-	33.9	33.1
Midwest	-	9.7	6.4
Urban-inside central city	-	17.6	8.4
Urban-outside central city	-	8.6	7.4
Nonurban area	-	9.8	5.8
South	-	21.1	21.6
Urban-inside central city	-	26.9	16.2
Urban-outside central city	-	16.6	18.1
Nonurban area	-	22.2	23.4
West	-	24.6	24.4
Urban-inside central city	-	29.7	45.3
Urban-outside central city	-	38.3	31.6
Nonurban area	-	18.2	19.0

- Metro status data not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-40. Number and percentage of school districts with community service requirements for high school graduation in school districts with 4-year programs, by selected district characteristics: 1993-94

District Characteristic	Number of Districts	Percent of Districts
TOTAL	364	3.3
District Size		
Under 1,000	102	2.3
1,000 to 9,999	236	3.9
10,000 or more	26	3.9
Minority Students^a		
Under 10%	218	3.3
10% to under 50%	124	3.7
50% or more	22	1.9
Minority Teachers		
None	151	3.1
More than 0% to under 20%	199	3.7
20% or more	13	1.6
Metro Status		
Urban-inside central city	18	4.0
Urban-outside central city	206	4.8
Nonurban area	139	2.2
Region by Metro Status		
Northeast	138	6.3
Urban-inside central city	4	4.5
Urban-outside central city	110	7.8
Nonurban area	24	3.6
Midwest	117	2.7
Urban-inside central city	11	8.1
Urban-outside central city	49	3.3
Nonurban area	57	2.1
South	53	1.7
Urban-inside central city	4	2.3
Urban-outside central city	21	2.5
Nonurban area	28	1.3
West	57	3.7
Urban-inside central city	0	0.0
Urban-outside central city	26	5.1
Nonurban area	31	3.2

a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-41. Percentage of school districts and number of students in grades K-12 participating in Chapter 1 programs, by selected district characteristics: 1993-94

District Characteristic	Percent of Districts	Number of Students
TOTAL	91.6	5,954,190
District Size		
Under 1,000	85.7	415,656
1,000 to 9,999	97.6	2,531,834
10,000 or more	98.8	3,006,700
Minority Students^a		
Under 10%	89.9	1,169,190
10% to under 50%	94.1	1,676,181
50% or more	96.7	3,108,819
Minority Teachers		
None	86.9	600,777
More than 0% to under 20%	96.1	2,681,980
20% or more	95.0	2,671,433
Metro Status		
Urban-inside central city	92.5	2,218,016
Urban-outside central city	94.8	2,098,261
Nonurban area	89.2	1,637,913
Region by Percent Minority Students^a		
Northeast	94.5	1,064,420
Under 10%	95.7	319,267
10% to under 50%	91.4	174,332
50% or more	98.2	570,821
Midwest	88.4	853,974
Under 10%	87.8	449,395
10% to under 50%	95.0	195,581
50% or more	90.2	208,998
South	97.1	2,212,521
Under 10%	98.6	303,523
10% to under 50%	96.6	864,842
50% or more	96.6	1,044,157
West	88.1	1,823,275
Under 10%	81.0	97,006
10% to under 50%	91.0	441,426
50% or more	97.9	1,284,843

a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-42. Percentage of school districts with various types of programs for prekindergarten-age children, by selected district characteristics: 1993-94

District Characteristic	Type of Prekindergarten Programs					
	Head Start	Day Care	Chapter 1	Special Education	General	No PK Programs
TOTAL^a	24.3	14.5	8.4	44.9	25.1	35.9
District Size						
Under 1,000	15.9	8.4	4.4	31.3	20.8	48.6
1,000 to 9,999	31.8	18.9	10.8	57.3	28.0	24.2
10,000 or more	44.8	39.3	29.7	74.2 ^c	43.8	9.1
Minority Students^b						
Under 10%	22.3	11.7	6.2	42.4	22.1	40.7
10% to under 50%	24.3	19.0	10.8	48.4	28.7	30.5
50% or more	35.7	18.5	14.6	48.9	32.5	23.2
Minority Teachers						
None	19.9	8.6	5.7	38.6	22.1	44.1
More than 0% to under 20%	26.4	19.9	9.9	50.7	26.6	29.6
20% or more	41.9	22.3	18.6	52.2	36.4	18.9
Metro Status						
Urban-inside central city	35.9	33.2	26.3	63.7	38.1	16.0
Urban-outside central city	20.3	17.5	6.4	45.5	25.1	36.5
Nonurban area	26.4	11.2	8.7	43.2	24.2	36.8
Region by Percent Minority Students^b						
Northeast	16.3	12.5	8.1	36.5	19.5	45.9
Under 10%	16.7	11.9	8.1	33.3	18.6	47.8
10% to under 50%	10.9	13.9	7.0	44.2	20.7	42.9
50% or more	36.9	14.7	11.6	49.7	29.5	26.8
Midwest	25.7	13.5	7.7	51.9	28.3	31.6
Under 10%	25.1	12.1	6.7	50.1	26.3	33.3
10% to under 50%	28.2	21.0	13.7	60.1	38.0	24.0
50% or more	34.6	17.5	9.9	63.8	45.0	15.7
South	33.1	14.6	14.3	46.4	35.2	24.8
Under 10%	35.9	14.3	5.7	42.8	26.1	31.9
10% to under 50%	29.6	13.8	15.1	48.1	36.9	24.1
50% or more	38.1	16.7	22.5	46.5	42.0	17.9
West	20.1	18.7	3.7	38.5	13.4	46.2
Under 10%	12.4	8.2	1.4	29.0	9.5	62.5
10% to under 50%	21.3	28.9	4.3	42.8	14.3	37.7
50% or more	32.9	21.6	7.0	48.6	19.5	30.3

a) Totals sum to more than 100% since districts could provide more than one program.

b) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-43. Percentage of school districts with students eligible for participation and numbers of students in grades K-12 approved for participation in and receiving free or reduced-price lunches through the National School Lunch Program, by selected district characteristics: 1993-94

District Characteristic	Percent of Districts	Students Approved for Participation	Students Receiving Free or Reduced-price Lunch
TOTAL	92.6	17,224,542	13,073,607
District Size			
Under 1,000	87.7	1,260,477	847,756
1,000 to 9,999	97.5	7,416,952	5,454,592
10,000 or more	98.6	8,547,113	6,771,258
Minority Students^a			
Under 10%	90.6	4,497,651	2,726,250
10% to under 50%	96.4	6,027,891	4,551,890
50% or more	96.3	6,699,000	5,795,467
Minority Teachers			
None	88.8	2,107,404	1,360,128
More than 0% to under 20%	96.2	9,027,303	6,446,063
20% or more	95.2	6,089,835	5,267,416
Metro Status			
Urban-inside central city	96.2	5,443,823	4,598,542
Urban-outside central city	95.3	6,792,835	4,777,120
Nonurban area	90.3	4,987,884	3,697,946
Region by Percent Minority Students^a			
Northeast	91.3	2,807,602	2,033,010
Under 10%	91.7	928,032	586,908
10% to under 50%	90.6	525,696	339,388
50% or more	96.1	1,353,873	1,106,714
Midwest	90.4	3,328,488	2,211,641
Under 10%	89.4	1,945,330	1,086,304
10% to under 50%	98.1	811,479	622,241
50% or more	96.5	571,679	503,097
South	98.2	7,137,168	5,752,211
Under 10%	99.6	1,082,290	767,679
10% to under 50%	98.3	3,297,023	2,594,003
50% or more	96.4	2,757,855	2,390,529
West	91.6	3,951,285	3,076,744
Under 10%	86.1	541,999	285,359
10% to under 50%	95.5	1,393,693	996,257
50% or more	96.3	2,015,593	1,795,128

a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-44. Number and percentage of school districts with a student test performance reporting policy, by selected district characteristics: 1993-94

District Characteristic	Number of Districts	Percent of Districts
TOTAL	12,642	84.4
District Size		
Under 1,000	5,876	77.0
1,000 to 9,999	6,094	91.6
10,000 or more	672	94.9
Minority Students^a		
Under 10%	7,333	81.1
10% to under 50%	3,895	90.9
50% or more	1,405	87.2
Minority Teachers		
None	5,686	77.9
More than 0% to under 20%	6,043	90.8
20% or more	913	87.9
Region		
Northeast	2,632	85.1
Midwest	4,579	81.0
South	3,033	91.7
West	2,398	81.7
Metro Status by District Size		
Urban-inside central city	469	83.7
Under 1,000	--	--
1,000 to 9,999	217	85.2
10,000 or more	231	93.5
Urban-outside central city	5,417	90.2
Under 1,000	1,838	87.2
1,000 to 9,999	3,201	91.5
10,000 or more	379	95.6
Nonurban area	6,756	80.2
Under 1,000	4,017	73.6
1,000 to 9,999	2,676	92.3
10,000 or more	62	95.4

-- Too few cases for a reliable estimate.

a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding or cell suppression.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-45. Percentage of school districts with choice by type of choice program, by selected district characteristics: 1993-94

District Characteristics	Any Choice Program	Magnet School	Dist. Open Enrollment	Interdistrict Choice	
				Transfers Outside of District	Transfers into District
TOTAL	34.1	7.8	13.8	28.5	25.6
District Size					
Under 1,000	35.5	5.9	8.7	32.0	26.3
1,000 to 9,999	31.2	7.3	17.3	24.1	23.8
10,000 or more	47.4	33.0	36.1	32.7	34.6
Minority Students^a					
Under 10%	36.3	6.7	12.6	30.9	27.3
10% to under 50%	32.7	8.3	16.2	26.7	24.2
50% or more	27.1	12.8	14.3	20.7	20.6
Minority Teachers					
None	36.0	6.3	10.0	31.4	26.6
More than 0% to under 20%	32.6	8.6	17.6	26.2	24.8
20% or more	30.8	13.6	16.4	22.8	23.5
Region					
Northeast	13.3	4.2	5.5	9.6	8.5
Midwest	41.6	7.7	15.0	34.6	29.7
South	29.5	7.7	10.4	24.0	23.8
West	47.1	12.1	24.0	41.7	37.6
Metro Status by District Size					
Urban-inside central city	42.6	24.3	29.3	26.2	28.2
Under 1,000	--	--	--	--	--
1,000 to 9,999	36.9	11.3	26.7	22.3	23.2
10,000 or more	54.8	43.1	38.5	36.5	38.6
Urban-outside central city	27.8	7.6	15.4	22.1	19.6
Under 1,000	21.2	--	--	19.7	12.8
1,000 to 9,999	29.9	8.2	17.8	22.6	22.3
10,000 or more	43.9	28.4	34.5	30.3	32.1
Nonurban area	38.1	6.9	11.7	33.2	29.7
Under 1,000	41.2	7.2	9.1	37.1	31.7
1,000 to 9,999	32.2	5.9	15.8	26.0	25.7
10,000 or more	40.1	23.1	36.6	33.1	34.6

-- Too few cases for a reliable estimate.

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-46. Percentage of school districts with written policies about student discipline, alcohol use, drug use, and tobacco use, by selected district characteristics: 1993-94

District Characteristic	Student Discipline	Alcohol Use	Drug Use	Tobacco Use
TOTAL	99.3	98.9	98.9	97.9
District Size				
Under 1,000	98.8	98.1	98.0	97.4
1,000 to 9,999	99.9	99.7	99.7	98.6
10,000 or more	99.6	99.3	99.3	98.1
Minority Students^a				
Under 10%	99.6	99.0	99.0	98.0
10% to under 50%	99.8	99.6	99.5	98.6
50% or more	99.5	98.9	99.0	98.4
Minority Teachers				
None	99.1	98.3	98.3	97.3
More than 0% to under 20%	99.7	99.5	99.5	98.7
20% or more	98.6	98.6	98.8	97.5
Region				
Northeast	99.0	97.6	97.7	95.6
Midwest	99.3	98.9	98.8	98.1
South	99.9	99.9	99.8	99.2
West	99.2	99.0	99.0	98.7
Metro Status by District Size				
Urban-inside central city	99.4	99.2	99.2	98.3
Under 1,000	96.1	98.3	98.3	98.3
1,000 to 9,999	100.0	100.0	100.0	98.3
10,000 or more	99.6	98.6	98.6	98.2
Urban-outside central city	99.5	98.7	98.8	98.0
Under 1,000	98.8	97.4	97.4	97.0
1,000 to 9,999	99.9	99.3	99.5	98.5
10,000 or more	99.6	99.5	99.5	98.2
Nonurban area	99.2	99.0	98.9	97.9
Under 1,000	98.8	98.4	98.3	97.5
1,000 to 9,999	99.9	100.0	100.0	98.6
10,000 or more	100.0	100.0	100.0	96.9

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Section 2

State Tables

Table A-47. Number of full and part time teachers and percentage by race and ethnicity, by state: 1993-94

State	Total Teachers	Percent by Race and Ethnicity				
		American Indian	Asian	Hispanic	Black	White
50 States and D.C.	2,599,569	0.3	1.0	3.4	8.2	87.0
Alabama	46,175	0.1	0.1	0.1	20.0	79.6
Alaska	8,303	5.4	1.5	1.3	2.0	89.7
Arizona	40,910	2.0	0.5	8.0	1.7	87.7
Arkansas	28,934	0.3	0.1	0.1	13.6	85.9
California	225,098	0.6	4.2	8.7	5.0	81.5
Colorado	30,087	0.4	0.8	4.8	1.5	92.5
Connecticut	36,533	0.1	0.2	2.5	2.7	94.5
Delaware	6,606	0.1	0.4	0.8	13.6	85.2
District of Columbia	6,708	0.1	0.8	0.3	62.9	35.9
Florida	121,319	0.2	0.3	6.7	14.1	78.7
Georgia	75,986	0.1	0.2	0.3	20.5	78.9
Hawaii	10,300	0.0	72.7	1.1	0.6	25.6
Idaho	12,351	0.2	0.6	1.1	0.1	98.0
Illinois	93,291	0.1	0.4	0.9	3.6	95.1
Indiana	57,845	0.0	0.2	0.5	4.6	94.8
Iowa	33,983	0.1	0.2	0.4	0.8	98.5
Kansas	31,127	0.5	0.3	1.0	1.9	96.3
Kentucky	40,864	0.1	0.1	0.1	3.8	95.9
Louisiana	47,430	0.0	0.2	0.3	26.5	73.0
Maine	16,769	0.1	0.1	0.2	0.1	99.6
Maryland	46,822	0.1	0.5	0.5	20.9	78.0
Massachusetts	63,342	0.1	0.7	2.1	3.1	94.1
Michigan	84,040	0.1	0.2	0.9	7.8	91.0
Minnesota	43,970	0.4	0.2	0.2	0.2	99.0
Mississippi	29,864	0.0	0.1	0.1	28.8	70.9
Missouri	57,468	0.1	0.2	0.4	7.7	91.5
Montana	11,643	2.3	0.2	0.3	0.1	97.1
Nebraska	17,334	0.1	0.1	0.5	0.4	98.9
Nevada	13,119	1.2	1.3	3.3	5.3	88.8
New Hampshire	12,383	0.0	0.1	0.2	0.1	99.5
New Jersey	87,504	0.0	0.7	2.0	6.7	90.6
New Mexico	19,049	1.4	0.6	23.2	1.1	73.6
New York	194,008	0.1	0.9	4.9	8.6	85.5
North Carolina	68,718	0.2	0.2	0.5	14.1	85.0
North Dakota	8,578	1.4	0.1	0.1	0.0	98.4
Ohio	109,168	0.0	0.2	0.3	7.3	92.2
Oklahoma	39,870	5.4	0.2	0.7	3.7	90.0
Oregon	25,356	0.5	1.5	1.6	1.1	95.4
Pennsylvania	114,322	0.0	0.2	0.3	5.7	93.8
Rhode Island	10,662	0.1	0.2	0.8	2.2	96.8
South Carolina	40,069	0.1	0.1	0.2	19.0	80.7
South Dakota	9,785	1.0	0.0	0.1	0.2	98.7
Tennessee	49,043	0.0	0.1	0.1	13.4	86.3
Texas	234,674	0.2	0.4	12.9	8.1	78.4
Utah	20,907	0.4	0.7	0.9	0.1	97.8
Vermont	8,220	0.0	0.1	0.3	0.1	99.5
Virginia	69,314	0.1	0.5	0.6	16.1	82.7
Washington	51,815	0.8	2.2	1.5	1.7	93.8
West Virginia	21,328	0.0	0.1	0.1	2.1	97.6
Wisconsin	59,749	0.2	0.3	0.6	2.7	96.1
Wyoming	6,828	0.8	0.5	1.5	0.6	96.6

Details may not add to totals and percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-48. Number of students and percentage by race and ethnicity, by state: 1993-94

State	Total Students	Percent by Race and Ethnicity				
		American Indian	Asian	Hispanic	Black	White
50 States and D.C.	42,302,143	1.1	3.6	12.3	16.2	66.8
Alabama	740,467	0.9	0.6	0.4	35.3	62.8
Alaska	126,675	22.9	3.8	2.4	5.1	65.8
Arizona	749,470	7.4	1.6	27.3	3.9	59.8
Arkansas	436,752	0.2	0.6	0.9	25.1	73.2
California	5,165,520	0.8	11.5	36.9	8.2	42.7
Colorado	505,857	1.0	2.1	14.6	4.1	78.3
Connecticut	475,008	0.2	2.4	10.7	11.7	74.9
Delaware	101,310	0.2	1.8	3.5	27.4	67.1
District of Columbia	75,462	0.0	1.3	6.1	88.6	4.0
Florida	2,043,110	0.2	1.6	14.4	24.8	59.1
Georgia	1,216,641	0.1	1.4	1.5	36.1	60.9
Hawaii	179,877	0.3	72.8	5.2	2.7	19.0
Idaho	233,041	1.1	1.0	6.8	0.4	90.7
Illinois	1,478,038	0.3	3.1	5.6	12.0	79.1
Indiana	980,702	0.2	1.2	2.2	11.1	85.3
Iowa	481,273	0.4	1.6	1.7	3.2	93.2
Kansas	438,466	1.0	1.8	4.8	6.4	86.0
Kentucky	653,786	0.1	0.5	0.3	9.8	89.4
Louisiana	795,160	0.2	0.9	1.0	39.4	58.6
Maine	217,335	0.6	0.5	0.3	0.7	97.9
Maryland	744,266	0.3	2.4	1.6	35.7	60.0
Massachusetts	875,461	0.2	3.7	8.4	8.0	79.7
Michigan	1,526,649	1.1	1.4	2.3	19.9	75.1
Minnesota	710,619	2.7	1.7	1.2	1.5	93.0
Mississippi	511,698	0.1	0.5	0.2	49.5	49.7
Missouri	845,038	0.2	0.8	0.8	17.0	81.2
Montana	161,503	9.5	0.7	1.3	0.4	88.1
Nebraska	227,683	1.3	1.1	3.5	1.5	92.5
Nevada	235,514	2.0	4.0	14.3	9.2	70.5
New Hampshire	176,919	0.2	1.0	1.0	0.9	96.8
New Jersey	1,106,736	0.4	5.6	10.3	17.3	66.4
New Mexico	314,597	11.0	1.0	42.6	2.6	42.8
New York	2,763,694	0.4	5.1	17.1	19.8	57.5
North Carolina	1,078,941	1.5	1.0	1.2	28.9	67.4
North Dakota	120,971	7.1	0.6	0.8	0.7	90.9
Ohio	1,842,541	0.4	1.1	1.7	14.6	82.2
Oklahoma	573,178	13.9	1.2	3.6	10.0	71.3
Oregon	441,629	1.8	3.6	6.3	3.4	84.9
Pennsylvania	1,827,346	0.1	1.5	2.6	14.6	81.1
Rhode Island	145,179	0.3	3.2	8.7	7.2	80.6
South Carolina	650,041	0.2	0.6	0.5	42.4	56.3
South Dakota	133,601	8.8	0.7	0.6	0.7	89.1
Tennessee	840,236	0.1	0.8	0.4	24.0	74.8
Texas	3,573,243	0.2	1.9	35.2	15.2	47.4
Utah	467,120	1.5	2.0	4.6	0.6	91.3
Vermont	98,348	0.2	0.8	0.3	0.7	98.0
Virginia	1,019,518	0.1	3.5	2.3	27.0	67.1
Washington	935,569	2.9	6.4	7.1	4.6	79.0
West Virginia	312,221	0.1	0.4	0.2	3.7	95.6
Wisconsin	848,906	1.3	2.4	3.1	10.2	83.1
Wyoming	99,230	2.9	0.7	6.0	0.8	89.6

Details may not add to totals and percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-49. Total number of full time equivalent (FTE) teachers and percentage that consists of new hires, by state: 1993-94

State	Total FTE Teachers	Percent New Hires
50 States and D.C.	2,501,112	7.9
Alabama	44,468	8.1
Alaska	7,886	9.3
Arizona	39,334	11.1
Arkansas	27,771	8.1
California	215,044	8.0
Colorado	29,004	9.4
Connecticut	35,142	5.2
Delaware	6,555	6.5
District of Columbia	6,056	6.1
Florida	116,299	9.7
Georgia	74,405	10.0
Hawaii	10,300	11.5
Idaho	12,130	8.7
Illinois	89,862	8.6
Indiana	56,469	5.4
Iowa	32,120	6.4
Kansas	29,345	8.8
Kentucky	40,285	6.8
Louisiana	46,398	7.9
Maine	16,384	6.4
Maryland	43,627	8.4
Massachusetts	59,665	6.5
Michigan	80,674	3.6
Minnesota	42,271	9.0
Mississippi	29,321	10.2
Missouri	55,093	8.8
Montana	10,866	8.9
Nebraska	16,721	7.1
Nevada	12,177	10.4
New Hampshire	11,821	7.8
New Jersey	84,436	5.5
New Mexico	18,013	12.5
New York	181,499	4.5
North Carolina	66,259	10.8
North Dakota	8,100	6.7
Ohio	107,609	5.4
Oklahoma	39,269	9.1
Oregon	23,209	5.2
Pennsylvania	111,711	7.2
Rhode Island	10,329	2.9
South Carolina	39,363	9.1
South Dakota	9,343	7.9
Tennessee	48,148	8.3
Texas	231,393	12.0
Utah	20,320	8.0
Vermont	7,641	6.2
Virginia	65,637	8.9
Washington	47,036	8.4
West Virginia	20,718	2.5
Wisconsin	56,887	4.9
Wyoming	6,701	8.4

Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-50. Number of newly hired FTE teachers, and percentage of newly hired FTE teachers with regular state certification, newly hired FTE teachers with emergency certification, and newly hired FTE teachers lacking regular state or emergency certification in their field of assignment, by state: 1993-94

State	Number of Newly Hired Teachers	Percent Newly Hired with Regular State Certification in Field of Assignment	Percent Newly Hired with Emergency Certification	Percent Newly Hired lacking Regular State or Emergency Certification in Field of Assignment
50 States and D.C.	197,323	86.5	7.6	5.9
Alabama	3,618	94.0	1.4	4.6
Alaska	731	99.6	0.4	0.0
Arizona	4,351	89.2	4.4	6.4
Arkansas	2,261	92.0	2.8	5.2
California	17,307	71.1	20.6	8.3
Colorado	2,718	90.9	5.2	3.9
Connecticut	1,828	96.8	0.3	2.9
Delaware	424	91.8	3.4	4.8
District of Columbia	372	13.8	32.6	53.6
Florida	11,271	78.0	10.0	12.0
Georgia	7,476	83.7	2.7	13.7
Hawaii	1,181	83.2	16.8	0.0
Idaho	1,050	95.8	2.5	1.8
Illinois	7,684	96.1	0.8	3.2
Indiana	3,029	95.3	3.9	0.9
Iowa	2,070	93.2	4.6	2.3
Kansas	2,570	97.0	0.6	2.4
Kentucky	2,736	94.8	2.3	3.0
Louisiana	3,661	69.5	21.5	9.0
Maine	1,045	90.9	8.8	0.3
Maryland	3,668	73.4	17.3	9.3
Massachusetts	3,876	85.2	4.3	10.5
Michigan	2,886	96.1	3.4	0.5
Minnesota	3,802	97.9	1.5	0.6
Mississippi	2,986	85.4	11.4	3.3
Missouri	4,863	91.6	5.0	3.4
Montana	971	98.0	1.4	0.6
Nebraska	1,181	92.3	5.8	1.9
Nevada	1,270	99.3	0.6	0.2
New Hampshire	927	91.4	4.4	4.2
New Jersey	4,647	91.1	4.5	4.4
New Mexico	2,255	73.5	10.8	15.8
New York	8,168	98.4	0.6	1.1
North Carolina	7,181	88.0	8.6	3.3
North Dakota	545	99.0	0.6	0.5
Ohio	5,788	97.0	2.2	0.8
Oklahoma	3,558	92.8	3.8	3.5
Oregon	1,204	93.9	4.2	1.9
Pennsylvania	8,032	96.5	0.9	2.7
Rhode Island	303	98.0	2.0	0.0
South Carolina	3,597	95.1	2.4	2.5
South Dakota	737	96.4	2.7	1.0
Tennessee	4,012	89.7	7.4	3.0
Texas	27,686	76.2	13.1	10.7
Utah	1,623	67.9	8.4	23.6
Vermont	476	98.0	1.3	0.7
Virginia	5,873	90.8	7.5	1.7
Washington	3,973	98.1	0.3	1.6
West Virginia	528	88.0	10.4	1.6
Wisconsin	2,762	95.0	4.5	0.5
Wyoming	566	96.8	2.6	0.7

Details may not add to totals and percentages may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-51. Percentage of school districts with different criteria for considering applicants for teaching positions, by state: 1993-94

State	Certification Type (in Field)			Graduate of Teacher Ed. Program	Special Knowledge Test	
	Full Standard	Emergency/Temporary	College Major/Minor in Teaching Field		District or State	National Teacher Exam
50 States and D.C.	83.3	67.4	71.9	66.9	51.2	30.7
Alabama	86.9	63.3	89.8	88.2	12.7	4.6
Alaska	66.4	45.4	71.0	22.1	0.0	0.0
Arizona	85.3	69.6	59.3	64.9	78.6	6.3
Arkansas	63.5	64.1	84.7	62.8	65.5	93.8
California	78.0	82.2	63.0	44.7	89.4	19.5
Colorado	77.2	68.2	55.7	69.7	86.7	1.5
Connecticut	95.2	58.7	72.0	56.8	84.5	11.9
Delaware	52.9	82.4	52.9	70.6	70.6	0.0
District of Columbia ^a	100.0	0.0	0.0	100.0	0.0	100.0
Florida	58.0	75.8	36.3	27.1	72.5	1.5
Georgia	46.0	85.9	42.3	46.8	89.0	0.8
Hawaii ^a	100.0	0.0	100.0	0.0	0.0	100.0
Idaho	88.7	66.4	75.1	62.4	28.3	85.5
Illinois	88.3	59.2	72.4	69.2	87.8	7.8
Indiana	88.2	68.9	80.5	80.6	68.0	72.8
Iowa	77.5	80.9	75.5	64.6	0.0	0.3
Kansas	89.7	55.2	80.6	75.4	76.7	53.5
Kentucky	93.5	54.8	95.2	92.6	39.7	79.1
Louisiana	78.7	84.3	78.2	60.0	17.0	91.6
Maine	87.6	69.3	59.2	67.2	40.6	65.2
Maryland	64.5	62.3	37.7	57.6	0.0	89.8
Massachusetts	89.9	68.0	41.5	59.7	6.1	1.3
Michigan	94.6	66.8	89.8	90.0	49.7	14.2
Minnesota	92.3	65.6	80.8	90.4	46.9	4.7
Mississippi	91.2	86.2	76.3	70.3	28.4	100.0
Missouri	64.6	82.6	86.9	68.7	20.2	14.1
Montana	85.7	56.6	73.8	77.7	33.2	72.9
Nebraska	89.3	55.7	83.7	69.0	51.6	11.9
Nevada	72.2	66.7	66.7	72.2	61.1	77.8
New Hampshire	85.0	78.9	55.4	70.7	7.1	0.0
New Jersey	88.4	52.9	37.4	44.0	33.8	77.6
New Mexico	74.8	76.1	85.4	70.9	48.3	84.6
New York	95.4	60.3	61.8	66.1	50.6	81.7
North Carolina	64.3	74.2	58.1	67.4	21.4	96.8
North Dakota	95.7	33.3	81.7	96.3	3.3	2.4
Ohio	97.0	57.3	84.9	78.1	29.1	35.6
Oklahoma	69.8	80.3	76.9	73.6	90.5	11.6
Oregon	72.7	50.2	74.1	39.3	38.9	14.4
Pennsylvania	97.6	58.7	73.6	81.7	69.1	50.1
Rhode Island	100.0	54.1	67.6	70.3	21.6	70.3
South Carolina	84.4	82.4	80.6	51.3	61.4	96.6
South Dakota	89.2	61.1	80.5	70.2	0.0	0.8
Tennessee	93.2	70.4	77.2	47.6	41.8	77.3
Texas	63.4	85.1	75.9	54.3	91.9	6.3
Utah	74.2	76.3	72.6	58.8	0.0	0.0
Vermont	98.3	64.8	55.3	63.7	4.1	0.9
Virginia	71.3	84.1	40.3	52.1	25.7	86.8
Washington	80.9	63.2	75.4	51.4	17.6	0.7
West Virginia	81.3	77.3	87.1	68.2	79.5	13.1
Wisconsin	84.6	72.6	80.0	90.0	10.6	0.0
Wyoming	85.7	60.7	57.8	69.0	6.0	0.0

a) The District of Columbia and Hawaii each have only one school district.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-52. Percentage of school districts using pay incentives to recruit or retain teachers to teach in less desirable locations or in fields of shortage, by state: 1987-88 to 1993-94

State	School Year		
	<u>1987-88</u> Percent	<u>1990-91</u> Percent	<u>1993-94</u> Percent
50 States and D.C.	7.5	11.2	14.6
Alabama	3.9	4.5	6.7
Alaska	0.0	9.2	19.4
Arizona	13.9	28.5	35.7
Arkansas	0.6	11.1	12.2
California	6.3	12.1	16.8
Colorado	4.6	13.4	17.3
Connecticut	6.5	7.0	2.2
Delaware	0.0	0.0	5.9
District of Columbia ^a	0.0	100.0	100.0
Florida	3.1	12.9	18.2
Georgia	10.8	21.7	36.3
Hawaii ^a	0.0	100.0	100.0
Idaho	16.2	7.6	10.9
Illinois	1.5	8.1	12.8
Indiana	4.6	3.3	3.7
Iowa	7.8	6.5	9.4
Kansas	9.9	4.6	8.7
Kentucky	11.2	4.5	9.3
Louisiana	2.9	7.7	10.3
Maine	1.6	4.3	1.3
Maryland	0.0	9.5	14.4
Massachusetts	3.8	3.6	8.2
Michigan	5.6	9.6	10.3
Minnesota	13.5	3.8	15.6
Mississippi	2.0	10.2	13.5
Missouri	8.4	10.6	13.3
Montana	3.8	16.4	8.1
Nebraska	9.8	8.4	15.5
Nevada	17.6	29.4	38.9
New Hampshire	5.4	3.9	5.4
New Jersey	3.2	11.8	13.0
New Mexico	14.6	6.0	7.4
New York	9.7	11.3	11.5
North Carolina	7.7	14.7	32.5
North Dakota	9.9	9.8	18.0
Ohio	2.5	3.2	3.3
Oklahoma	6.1	17.8	22.1
Oregon	1.2	13.3	14.8
Pennsylvania	6.6	9.5	7.7
Rhode Island	7.0	3.1	13.5
South Carolina	3.6	18.4	7.7
South Dakota	9.3	16.5	21.0
Tennessee	2.2	7.0	5.0
Texas	25.1	29.3	44.0
Utah	20.5	10.1	20.8
Vermont	3.4	3.1	2.0
Virginia	7.8	10.9	8.6
Washington	2.0	1.9	4.0
West Virginia	6.2	15.1	25.2
Wisconsin	7.0	15.3	14.1
Wyoming	9.1	12.0	8.6

a) The District of Columbia and Hawaii each have only one school district.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-53. Percentage of school districts in which free training is offered to prepare staff members to teach in fields with current or anticipated shortages, by state: 1987-88 to 1993-94

State	School Year		
	1987-88 Percent	1990-91 Percent	1993-94 Percent
50 States and D.C.	11.7	10.3	19.0
Alabama	9.7	14.6	14.1
Alaska	5.5	18.6	22.9
Arizona	23.6	15.5	24.2
Arkansas	10.3	11.3	15.6
California	16.0	18.0	39.2
Colorado	8.7	5.1	8.1
Connecticut	7.1	3.6	6.1
Delaware	44.4	63.2	35.3
District of Columbia ^a	100.0	100.0	0.0
Florida	25.2	51.0	64.8
Georgia	40.9	40.1	44.7
Hawaii ^a	0.0	100.0	100.0
Idaho	30.3	22.4	21.8
Illinois	5.6	4.3	12.9
Indiana	6.4	1.5	8.8
Iowa	8.3	7.5	13.7
Kansas	11.2	9.5	16.9
Kentucky	13.4	16.9	14.6
Louisiana	14.8	27.7	23.4
Maine	17.6	5.0	28.0
Maryland	38.2	24.3	15.4
Massachusetts	3.6	5.4	5.8
Michigan	8.7	6.4	23.7
Minnesota	8.6	3.3	1.2
Mississippi	35.7	28.6	29.7
Missouri	5.2	1.1	16.8
Montana	7.0	8.1	12.7
Nebraska	3.9	5.0	8.9
Nevada	17.6	5.9	27.8
New Hampshire	25.9	12.5	12.1
New Jersey	9.2	11.8	16.0
New Mexico	37.1	18.0	25.7
New York	7.2	6.0	12.0
North Carolina	31.2	28.9	39.9
North Dakota	13.2	4.0	20.0
Ohio	4.8	2.9	8.9
Oklahoma	12.8	13.7	16.3
Oregon	13.6	3.9	29.5
Pennsylvania	11.6	9.4	15.6
Rhode Island	0.0	2.6	11.6
South Carolina	26.1	22.8	36.2
South Dakota	13.7	16.0	23.5
Tennessee	8.8	14.4	25.1
Texas	14.3	13.2	27.5
Utah	33.6	55.9	63.2
Vermont	5.1	6.8	10.7
Virginia	52.8	52.1	57.7
Washington	11.1	9.8	29.0
West Virginia	26.1	18.5	9.8
Wisconsin	7.6	3.6	9.4
Wyoming	2.1	5.2	4.0

a) The District of Columbia and Hawaii each have only one school district.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-54. Average low and high salary for full time teachers in actual and in constant 1993-94 dollars, by state: 1990-91 to 1993-94^a

State	School Year						
	1990-91		1990-91		1993-94		
	Actual Dollars	Constant 1993-94 Dollars ^b	Actual Dollars	Constant 1993-94 Dollars ^b	Low	High	
Low	High	Low	High	Low	High		
50 States and D.C.	19,770	35,415	21,586	38,669	21,817	39,847	
Alabama	21,491	30,956	23,466	33,799	22,263	32,840	
Alaska	29,808	54,337	32,546	59,328	31,430	58,056	
Arizona	20,992	35,341	22,920	38,588	23,782	40,258	
Arkansas	17,410	24,392	19,010	26,633	19,603	29,685	
California	23,385	42,750	25,534	46,677	24,404	46,272	
Colorado	19,267	34,463	21,037	37,629	19,937	37,316	
Connecticut	25,244	50,428	27,563	55,061	28,200	56,198	
Delaware	21,131	44,258	23,072	48,323	22,914	47,743	
District of Columbia	23,305	48,175	25,446	52,600	22,000	54,000	
Florida	21,271	37,912	23,225	41,395	21,838	39,599	
Georgia	19,463	39,243	21,251	42,848	20,093	42,201	
Hawaii	23,969	46,641	26,171	50,925	25,436	49,199	
Idaho	17,023	30,231	18,586	33,008	18,102	33,128	
Illinois	18,608	35,605	20,318	38,876	21,413	42,006	
Indiana	20,602	38,088	22,494	41,587	22,557	42,057	
Iowa	17,668	29,880	19,291	32,625	18,789	33,209	
Kansas	20,293	32,452	22,157	35,433	22,714	36,671	
Kentucky	20,298	33,756	22,163	36,856	21,135	36,743	
Louisiana	17,610	29,896	19,228	32,642	18,570	31,342	
Maine	18,387	33,292	20,076	36,350	19,505	36,489	
Maryland	23,282	44,926	25,421	49,053	24,833	48,158	
Massachusetts	21,209	40,017	23,157	43,693	23,120	44,832	
Michigan	21,290	41,543	23,246	45,359	24,355	46,333	
Minnesota	20,840	35,858	22,755	39,152	21,965	38,638	
Mississippi	18,386	31,549	20,075	34,447	19,008	32,693	
Missouri	17,412	25,996	19,012	28,384	18,158	28,222	
Montana	16,247	29,132	17,740	31,808	17,217	30,421	
Nebraska	15,563	22,390	16,992	24,447	17,528	25,627	
Nevada	22,227	41,799	24,269	45,638	24,220	44,958	
New Hampshire	20,312	35,804	22,178	39,093	21,272	38,889	
New Jersey	24,261	48,385	26,490	52,830	28,437	57,383	
New Mexico	19,276	33,939	21,047	37,057	22,029	35,828	
New York	23,507	49,388	25,666	53,925	27,158	58,288	
North Carolina	19,961	38,080	21,795	41,578	20,077	38,733	
North Dakota	15,527	25,197	16,953	27,511	16,343	26,126	
Ohio	18,602	37,138	20,311	40,549	20,575	42,210	
Oklahoma	17,691	26,583	19,316	29,025	22,158	30,452	
Oregon	18,385	31,444	20,074	34,332	20,700	35,968	
Pennsylvania	22,824	41,888	24,921	45,736	26,311	50,377	
Rhode Island	20,815	41,466	22,727	45,275	23,308	46,078	
South Carolina	19,524	39,711	21,317	43,358	20,362	41,656	
South Dakota	16,355	25,844	17,857	28,219	17,920	27,490	
Tennessee	19,783	31,314	21,600	34,190	21,348	34,650	
Texas	18,350	30,783	20,036	33,611	19,009	32,357	
Utah	17,217	31,813	18,799	34,735	18,740	34,900	
Vermont	19,495	36,320	21,286	39,656	21,425	40,435	
Virginia	22,130	36,554	24,163	39,912	23,112	38,387	
Washington	19,992	41,622	21,828	45,445	21,441	44,892	
West Virginia	18,380	32,409	20,068	35,386	21,466	36,678	
Wisconsin	20,595	37,430	22,487	40,868	23,091	43,078	
Wyoming	19,667	35,148	21,473	38,377	20,137	38,701	

a) In districts with salary schedules, the low salary corresponds to bachelor's degree with no teaching experience and high is equivalent to maximum scheduled salary. Districts without salary schedule reported their lowest and highest base salaries for the year.

b) Adjusted using the Consumer Price Index.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-55. Average scheduled salary for teachers (in constant 1993-94 dollars) by education and teaching experience for school districts with salary schedules, by state: 1990-91 and 1993-94

State	1990-91 (Constant 1993-94 Dollars) ^a			1993-94 (Actual Dollars)		
	Bachelor's without Experience	Master's without Experience	Master's with 20 yrs Experience	Bachelor's without Experience	Master's without Experience	Master's with 20 yrs Experience
50 States and D.C.	21,742	23,691	36,249	21,923	23,956	37,213
Alabama	23,466	26,814	31,264	22,263	25,572	30,070
Alaska	32,546	37,086	53,975	31,374	35,950	52,421
Arizona	22,686	25,044	36,119	21,890	24,117	34,926
Arkansas	19,011	20,362	25,506	19,603	21,343	28,130
California	25,538	27,727	43,569	24,404	26,970	42,431
Colorado	21,037	23,361	33,153	19,937	22,158	32,318
Connecticut	27,563	29,651	49,944	28,195	30,482	51,283
Delaware	23,072	26,444	41,498	22,914	26,267	41,312
District of Columbia	25,446	27,991	50,940	22,000	28,000	40,000
Florida	23,225	25,295	37,753	21,838	23,580	35,826
Georgia	21,233	24,437	34,623	20,065	23,041	33,650
Hawaii	26,171	27,514	40,882	25,436	27,352	41,193
Idaho	18,603	21,124	30,892	18,102	20,733	31,092
Illinois	20,334	22,236	34,811	21,415	23,446	38,176
Indiana	22,507	23,833	40,313	22,560	23,899	40,535
Iowa	19,280	20,939	30,875	18,796	20,806	31,364
Kansas	22,155	23,981	31,768	22,714	24,733	32,522
Kentucky	22,163	24,876	32,523	21,135	23,899	33,419
Louisiana	19,137	19,563	28,869	18,045	18,432	27,133
Maine	20,076	21,782	34,953	19,566	21,121	34,832
Maryland	25,421	27,383	44,008	24,833	26,360	43,239
Massachusetts	23,168	25,058	39,880	23,108	25,101	41,105
Michigan	23,251	25,270	42,706	24,705	26,971	45,186
Minnesota	22,755	25,392	36,913	21,965	24,584	36,119
Mississippi	20,076	21,043	30,539	19,008	19,880	28,995
Missouri	18,982	20,406	26,875	18,158	19,671	26,171
Montana	18,041	20,025	31,594	17,801	19,870	32,316
Nebraska	16,964	19,720	27,385	17,781	20,735	30,326
Nevada	24,269	27,799	41,368	24,220	27,440	41,403
New Hampshire	22,121	24,254	37,839	21,317	23,245	37,164
New Jersey	26,852	28,768	46,690	28,424	30,677	53,874
New Mexico	21,047	22,949	33,032	22,114	23,159	31,785
New York	25,917	28,561	48,543	27,441	30,084	51,523
North Carolina	21,795	23,152	34,944	20,077	21,355	31,864
North Dakota	16,929	18,816	26,772	16,624	18,640	26,357
Ohio	20,311	22,462	38,059	20,550	22,822	39,096
Oklahoma	19,323	20,626	27,746	22,157	23,272	29,067
Oregon	20,100	22,124	32,524	20,708	22,964	34,216
Pennsylvania	24,918	26,175	41,842	26,341	28,012	45,741
Rhode Island	22,727	24,430	43,589	23,423	25,038	44,402
South Carolina	21,317	24,331	35,532	20,354	23,271	33,993
South Dakota	18,091	19,536	28,238	17,895	19,158	26,456
Tennessee	21,600	23,501	30,279	21,348	23,305	29,891
Texas	20,036	20,262	32,852	19,011	19,209	30,966
Utah	18,799	20,743	32,666	18,740	20,725	32,346
Vermont	20,987	23,673	37,282	20,918	23,584	37,003
Virginia	24,163	25,849	36,512	23,098	24,702	34,195
Washington	21,828	26,147	39,787	21,441	25,698	40,189
West Virginia	20,068	22,015	31,191	21,466	24,168	33,099
Wisconsin	22,487	25,124	38,236	23,080	25,853	40,316
Wyoming	21,473	24,183	34,766	20,137	23,058	34,048

a) Adjusted using the Consumer Price Index.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-56. Percentage of school districts with collective bargaining units, by state: 1993-94

State	Percent
50 States and D.C.	64.0
Alabama	3.4
Alaska	83.8
Arizona	2.7
Arkansas	2.0
California	87.7
Colorado	16.0
Connecticut	99.4
Delaware	94.1
District of Columbia	100.0
Florida	97.1
Georgia	0.8
Hawaii	100.0
Idaho	63.7
Illinois	93.9
Indiana	96.4
Iowa	89.7
Kansas	64.7
Kentucky	6.6
Louisiana	11.5
Maine	95.9
Maryland	100.0
Massachusetts	99.4
Michigan	85.8
Minnesota	89.2
Mississippi	0.0
Missouri	1.7
Montana	69.8
Nebraska	47.4
Nevada	88.8
New Hampshire	95.9
New Jersey	99.3
New Mexico	30.1
New York	99.1
North Carolina	0.0
North Dakota	40.4
Ohio	96.0
Oklahoma	30.1
Oregon	89.1
Pennsylvania	99.5
Rhode Island	100.0
South Carolina	0.0
South Dakota	49.4
Tennessee	55.2
Texas	0.0
Utah	35.6
Vermont	88.8
Virginia	0.0
Washington	74.5
West Virginia	0.0
Wisconsin	100.0
Wyoming	12.0

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-57. Percentage of school districts offering retirement plans to teachers, by state: 1987-88 to 1993-94

State	School Year		
	1987-88 Percent	1990-91 Percent	1993-94 Percent
50 States and D.C.	98.6	98.7	98.9
Alabama	100.0	99.3	99.0
Alaska	100.0	100.0	100.0
Arizona	98.5	93.7	100.0
Arkansas	100.0	100.0	100.0
California	100.0	92.8	99.7
Colorado	100.0	100.0	99.3
Connecticut	100.0	98.0	99.0
Delaware	100.0	100.0	100.0
District of Columbia	100.0	100.0	100.0
Florida	100.0	100.0	100.0
Georgia	100.0	98.2	100.0
Hawaii	100.0	100.0	100.0
Idaho	100.0	100.0	99.1
Illinois	98.3	99.0	99.2
Indiana	96.1	100.0	98.8
Iowa	88.0	95.4	97.5
Kansas	94.8	98.1	91.2
Kentucky	100.0	100.0	100.0
Louisiana	100.0	100.0	100.0
Maine	100.0	99.2	95.9
Maryland	100.0	100.0	100.0
Massachusetts	100.0	100.0	99.5
Michigan	98.0	99.0	100.0
Minnesota	95.7	98.8	98.0
Mississippi	100.0	100.0	100.0
Missouri	100.0	100.0	100.0
Montana	97.9	98.4	97.4
Nebraska	95.6	99.8	94.9
Nevada	100.0	100.0	100.0
New Hampshire	100.0	100.0	
New Jersey	99.7	99.4	98.2
New Mexico	100.0	100.0	100.0
New York	99.7	100.0	100.0
North Carolina	100.0	100.0	100.0
North Dakota	96.7	98.0	95.0
Ohio	99.4	100.0	100.0
Oklahoma	100.0	100.0	100.0
Oregon	100.0	100.0	100.0
Pennsylvania	100.0	100.0	100.0
Rhode Island	100.0	100.0	100.0
South Carolina	100.0	100.0	100.0
South Dakota	100.0	100.0	100.0
Tennessee	98.6	99.2	100.0
Texas	99.4	98.2	99.7
Utah	100.0	100.0	100.0
Vermont	96.6	99.2	96.4
Virginia	100.0	98.2	100.0
Washington	100.0	100.0	100.0
West Virginia	100.0	100.0	100.0
Wisconsin	98.2	100.0	99.3
Wyoming	100.0	97.6	97.2

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-58. Average number of years of English required for high school graduation in school districts with 4-year programs, by state: 1987-88 to 1993-94

State	School Year		
	1987-88 Number of Years	1990-91 Number of Years	1993-94 Number of Years
50 States and D.C.	3.8	3.8	3.9
Alabama	4.0	3.9	4.0
Alaska	4.0	4.0	4.0
Arizona	3.8	4.0	4.0
Arkansas	4.0	4.0	4.0
California	3.6	3.7	3.7
Colorado	3.9	3.9	3.8
Connecticut	3.9	4.0	4.0
Delaware	4.0	3.8	4.0
District of Columbia	4.0	4.0	4.0
Florida	4.0	4.0	4.0
Georgia	4.0	3.9	4.0
Hawaii	3.0	4.0	4.0
Idaho	3.9	3.9	4.0
Illinois	3.3	3.4	3.3
Indiana	3.9	3.9	4.0
Iowa	3.4	3.5	3.6
Kansas	4.0	4.0	4.0
Kentucky	4.0	4.0	4.0
Louisiana	3.8	3.7	4.0
Maine	3.8	4.0	4.0
Maryland	4.0	4.0	4.0
Massachusetts	3.9	4.0	3.9
Michigan	3.4	3.4	3.5
Minnesota	3.9	3.8	4.0
Mississippi	3.9	4.0	4.0
Missouri	3.2	3.2	3.2
Montana	3.9	4.0	4.0
Nebraska	3.1	3.9	3.9
Nevada	3.7	3.8	4.0
New Hampshire	3.9	3.9	4.0
New Jersey	4.0	4.0	4.0
New Mexico	4.0	4.0	4.0
New York	4.0	3.9	4.0
North Carolina	4.0	4.0	3.9
North Dakota	4.0	4.0	4.0
Ohio	3.6	3.6	3.7
Oklahoma	3.9	3.8	4.0
Oregon	3.9	3.8	3.9
Pennsylvania	3.9	4.0	4.0
Rhode Island	4.0	4.0	4.0
South Carolina	4.0	4.0	4.0
South Dakota	4.0	4.0	4.0
Tennessee	4.0	3.9	4.0
Texas	4.0	4.0	4.0
Utah	3.7	3.7	3.7
Vermont	4.0	3.9	4.0
Virginia	4.0	3.9	4.0
Washington	3.7	3.9	3.8
West Virginia	4.0	4.0	3.9
Wisconsin	3.8	4.0	4.0
Wyoming	3.8	3.7	3.9

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-59. Average number of years of mathematics required for high school graduation in school districts with 4-year programs, by state: 1987-88 to 1993-94

State	School Year		
	1987-88	1990-91	1993-94
Number of Years	Number of Years	Number of Years	
50 States and D.C.	2.4	2.4	2.5
Alabama	2.3	2.2	2.5
Alaska	2.3	2.2	2.6
Arizona	2.2	2.3	2.3
Arkansas	2.9	2.7	2.9
California	2.2	2.4	2.3
Colorado	2.5	2.6	2.5
Connecticut	3.2	3.0	3.0
Delaware	2.4	2.3	2.4
District of Columbia	2.0	2.0	2.0
Florida	3.0	3.1	3.0
Georgia	2.5	2.3	2.6
Hawaii	2.0	2.0	3.0
Idaho	2.3	2.3	2.4
Illinois	2.1	2.2	2.2
Indiana	2.2	2.5	2.2
Iowa	2.1	2.2	2.3
Kansas	2.2	2.2	2.4
Kentucky	3.0	3.0	2.9
Louisiana	3.0	2.9	3.0
Maine	2.6	2.6	2.5
Maryland	2.7	3.0	3.0
Massachusetts	2.6	2.7	2.5
Michigan	2.1	2.2	2.2
Minnesota	1.7	2.1	2.3
Mississippi	2.4	2.5	2.5
Missouri	2.1	2.2	2.2
Montana	2.3	2.3	2.2
Nebraska	2.0	2.2	2.5
Nevada	2.5	2.4	2.3
New Hampshire	2.2	2.2	2.2
New Jersey	2.3	2.7	3.0
New Mexico	2.6	2.9	3.0
New York	2.1	2.1	2.1
North Carolina	2.4	2.4	2.7
North Dakota	2.2	2.4	2.4
Ohio	2.1	2.2	2.2
Oklahoma	2.3	2.2	2.4
Oregon	2.3	2.2	2.1
Pennsylvania	2.9	3.0	3.2
Rhode Island	2.5	2.3	2.3
South Carolina	3.0	3.0	3.0
South Dakota	2.4	2.4	2.4
Tennessee	2.1	2.1	2.4
Texas	3.1	3.0	3.0
Utah	2.5	2.2	2.4
Vermont	2.7	2.7	3.0
Virginia	2.5	2.4	2.5
Washington	2.2	2.2	2.3
West Virginia	2.3	2.4	2.4
Wisconsin	2.0	2.1	2.2
Wyoming	2.5	2.4	2.5

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-60. Average number of years of social science required for high school graduation in school districts with 4-year programs, by state: 1987-88 to 1993-94

State	School Year		
	<u>1987-88</u>	<u>1990-91</u>	<u>1993-94</u>
Number of Years	Number of Years	Number of Years	
50 States and D.C.	2.8	2.9	3.0
Alabama	3.1	3.1	3.2
Alaska	3.1	2.9	3.0
Arizona	3.0	3.3	3.0
Arkansas	2.8	2.8	2.8
California	3.1	3.1	3.3
Colorado	2.9	3.0	3.0
Connecticut	3.1	3.0	3.0
Delaware	3.2	2.8	3.2
District of Columbia	2.0	2.0	2.0
Florida	3.0	3.1	3.1
Georgia	3.1	3.0	3.0
Hawaii	3.0	4.0	4.0
Idaho	2.9	2.9	2.9
Illinois	2.1	2.3	2.3
Indiana	2.4	2.6	2.4
Iowa	3.0	3.1	3.1
Kansas	2.9	2.9	3.0
Kentucky	2.2	2.3	2.3
Louisiana	2.8	2.9	3.0
Maine	2.3	2.4	2.4
Maryland	2.9	3.0	3.2
Massachusetts	2.5	2.6	2.5
Michigan	2.7	2.8	2.9
Minnesota	3.6	3.4	3.5
Mississippi	2.7	2.7	2.8
Missouri	2.7	2.8	2.7
Montana	2.6	2.5	2.7
Nebraska	2.5	3.1	3.2
Nevada	2.7	2.7	2.5
New Hampshire	2.3	2.6	2.6
New Jersey	2.5	2.8	2.9
New Mexico	2.6	3.0	3.0
New York	3.6	4.0	4.0
North Carolina	2.3	2.1	2.6
North Dakota	3.0	3.1	3.0
Ohio	2.6	2.6	2.7
Oklahoma	2.3	2.3	2.6
Oregon	3.1	3.1	3.2
Pennsylvania	3.5	3.3	3.6
Rhode Island	2.4	2.3	2.3
South Carolina	2.9	2.9	2.8
South Dakota	2.9	2.9	3.0
Tennessee	1.8	1.8	2.1
Texas	2.9	2.9	3.0
Utah	3.0	2.9	2.5
Vermont	2.9	2.9	2.9
Virginia	2.9	2.9	3.1
Washington	3.1	3.0	3.1
West Virginia	3.3	3.2	3.2
Wisconsin	3.2	3.1	3.1
Wyoming	2.8	2.7	2.8

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-61. Percentage of school districts with a student test performance reporting policy, by state: 1993-94

State	Percent of Districts
50 States and D.C.	84.4
Alabama	91.6
Alaska	96.2
Arizona	92.1
Arkansas	85.6
California	91.8
Colorado	98.3
Connecticut	94.4
Delaware	88.2
District of Columbia	100.0
Florida	100.0
Georgia	98.7
Hawaii	100.0
Idaho	82.4
Illinois	91.6
Indiana	90.6
Iowa	68.3
Kansas	73.1
Kentucky	98.6
Louisiana	91.3
Maine	88.7
Maryland	89.8
Massachusetts	80.3
Michigan	92.7
Minnesota	84.9
Mississippi	90.6
Missouri	68.1
Montana	38.6
Nebraska	64.8
Nevada	94.4
New Hampshire	63.8
New Jersey	97.7
New Mexico	97.9
New York	92.3
North Carolina	97.9
North Dakota	37.9
Ohio	90.6
Oklahoma	79.5
Oregon	90.2
Pennsylvania	75.6
Rhode Island	80.7
South Carolina	97.0
South Dakota	93.1
Tennessee	93.7
Texas	96.9
Utah	97.5
Vermont	66.3
Virginia	85.4
Washington	84.4
West Virginia	92.4
Wisconsin	95.5
Wyoming	88.3

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-62. Percentage of school districts with choice by type of choice program, by state: 1993-94

District Characteristic	Any Choice Program	Magnet School	Dist. Open Enrollment	Interdistrict Choice	
				Transfers Outside of District	Transfers into District
50 States and D.C.	34.1	7.8	13.8	28.5	25.6
Alabama	16.8	5.2	8.5	12.8	9.0
Alaska	31.8	12.2	23.5	24.3	19.7
Arizona	66.7	32.6	39.0	59.7	60.1
Arkansas	46.8	5.2	6.6	41.7	37.7
California	40.4	7.5	23.9	37.1	27.2
Colorado	58.3	16.2	28.5	46.8	50.6
Connecticut	21.3	11.3	8.0	10.9	8.8
Delaware	11.7	5.8	5.8	5.8	11.7
District of Columbia ^a	100.0	0.0	0.0	0.0	0.0
Florida	39.8	24.2	28.2	22.0	22.0
Georgia	34.6	4.1	13.6	24.2	24.6
Hawaii ^a	0.0	0.0	0.0	0.0	0.0
Idaho	74.8	15.6	38.0	67.6	68.5
Illinois	8.8	2.2	3.8	4.1	1.9
Indiana	9.7	1.6	8.7	1.8	2.3
Iowa	83.8	7.5	13.7	83.0	74.3
Kansas	32.8	7.1	11.6	27.8	27.3
Kentucky	39.4	7.7	16.2	38.8	35.2
Louisiana	27.1	19.1	13.2	4.7	8.3
Maine	6.3	--	2.1	3.1	2.8
Maryland	15.3	10.2	--	5.0	5.0
Massachusetts	29.4	1.5	7.9	23.3	16.5
Michigan	38.7	5.5	23.0	25.5	11.8
Minnesota	93.0	19.8	27.5	93.0	89.2
Mississippi	12.8	5.1	6.6	8.2	9.5
Missouri	9.7	2.6	6.0	5.4	5.1
Montana	39.7	8.5	10.8	35.6	32.8
Nebraska	88.2	15.4	17.4	73.6	65.7
Nevada	16.6	11.1	--	--	5.5
New Hampshire	4.6	--	1.7	3.0	--
New Jersey	7.6	6.5	6.4	4.0	6.8
New Mexico	46.3	4.0	17.3	31.6	35.0
New York	16.0	4.9	7.3	11.2	13.5
North Carolina	23.7	8.7	15.2	20.6	21.5
North Dakota	31.8	--	1.6	26.3	17.6
Ohio	69.4	17.3	42.6	58.5	50.1
Oklahoma	34.1	9.8	10.1	33.0	33.0
Oregon	21.6	3.1	8.9	19.5	14.1
Pennsylvania	7.1	4.3	3.9	6.0	4.1
Rhode Island	13.4	2.7	5.3	10.7	2.7
South Carolina	6.3	4.8	1.0	2.6	3.6
South Dakota	10.4	3.2	5.2	4.3	7.6
Tennessee	56.4	9.9	34.0	41.6	45.3
Texas	22.7	5.1	5.3	18.5	17.9
Utah	76.1	20.0	62.1	64.2	69.2
Vermont	16.9	--	1.7	16.5	6.2
Virginia	21.8	15.2	11.6	8.8	15.0
Washington	78.6	24.7	41.8	71.1	72.8
Virginia	45.0	12.7	35.5	39.2	37.4
Wisconsin	5.3	1.5	1.9	2.9	3.0
Wyoming	35.8	14.9	18.7	27.1	25.4

-- Too few cases for a reliable estimate.

a) The District of Columbia and Hawaii each have only one school district.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Appendix B

Tables of Standard Errors

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Section 1

Selected District Characteristics Tables

Table B-1. Standard errors for number and percentage of school districts, by selected district characteristics: 1987-88 to 1993-94

District Characteristic	School Year					
	1987-88		1990-91		1993-94	
	Number	Percent	Number	Percent	Number	Percent
TOTAL	195	1.28	112	0.72	72	0.48
District Size						
Under 1,000	208	1.37	191	1.23	128	0.85
1,000 to 9,999	76	0.50	165	1.06	116	0.77
10,000 or more	9	0.06	37	0.24	8	0.05
Minority Students ^a						
Under 10%	181	1.18	164	1.06	119	0.79
10% to under 50%	93	0.61	145	0.94	127	0.85
50% or more	124	0.81	100	0.65	117	0.78
Minority Teachers						
None	225	1.48	182	1.17	186	1.24
More than 0% to under 20%	114	0.75	163	1.05	179	1.20
20% or more	71	0.46	56	0.36	45	0.30
Metro Status						
Urban-inside central city	-	-	78	0.50	23	0.15
Urban-outside central city	-	-	128	0.82	85	0.57
Nonurban area	-	-	108	0.70	114	0.76
Region						
Northeast	97	0.63	20	0.13	20	0.13
Midwest	123	0.81	100	0.65	62	0.42
South	81	0.53	52	0.34	14	0.09
West	123	0.80	44	0.28	15	0.10

^a Metro status data not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-2. Standard errors for number and percentage of school districts by metropolitan status, by region: 1990-91 to 1993-94

District Characteristic	School Year			
	1990-91		1993-94	
	Number	Percent	Number	Percent
TOTAL	112	0.72	72	0.48
Region by Metropolitan Status				
Northeast				
Urban-inside central city	16	0.10	7	0.04
Urban-outside central city	43	0.27	43	0.28
Nonurban area	33	0.22	38	0.26
Midwest				
Urban-inside central city	13	0.08	13	0.09
Urban-outside central city	72	0.46	57	0.38
Nonurban area	72	0.47	84	0.56
South				
Urban-inside central city	12	0.08	10	0.07
Urban-outside central city	33	0.21	11	0.07
Nonurban area	53	0.34	16	0.11
West				
Urban-inside central city	72	0.46	15	0.10
Urban-outside central city	87	0.56	59	0.40
Nonurban area	76	0.49	62	0.41

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-3. Standard errors for number and percentage of school districts by percent minority students, by region: 1987-88 to 1993-94

District Characteristic	School Year					
	1987-88		1990-91		1993-94	
	Number	Percent	Number	Percent	Number	Percent
TOTAL	195	1.28	112	0.72	72	0.48
Region by Percent Minority Students^a						
Northeast						
Under 10%	96	0.63	51	0.33	51	0.34
10% to under 50%	31	0.20	44	0.28	51	0.34
50% or more	22	0.15	18	0.11	20	0.13
Midwest						
Under 10%	123	0.81	131	0.84	90	0.60
10% to under 50%	43	0.28	81	0.52	56	0.37
50% or more	65	0.43	27	0.18	14	0.09
South						
Under 10%	72	0.47	48	0.31	37	0.25
10% to under 50%	58	0.38	63	0.41	42	0.28
50% or more	51	0.33	47	0.30	35	0.23
West						
Under 10%	88	0.58	101	0.65	80	0.53
10% to under 50%	71	0.47	99	0.64	105	0.70
50% or more	80	0.53	86	0.56	101	0.68

a) Excludes 82 districts with no students in 1987-88, 29 districts with no students in 1990-91, and 45 districts with no students in 1993-94.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-4. Standard errors for number and percentage of school districts by district size, by region: 1987-88 to 1993-94

District Characteristic	School Year					
	1987-88		1990-91		1993-94	
	Number	Percent	Number	Percent	Number	Percent
TOTAL	195	1.28	112	0.72	72	0.48
Region by District Size						
Northeast						
Under 1,000	98	0.64	85	0.55	56	0.37
1,000 to 9,999	36	0.23	91	0.59	59	0.39
10,000 or more	2	0.01	5	0.03	3	0.02
Midwest						
Under 1,000	134	0.88	81	0.52	107	0.71
1,000 to 9,999	51	0.34	92	0.59	75	0.50
10,000 or more	3	0.02	7	0.04	5	0.03
South						
Under 1,000	82	0.54	59	0.38	35	0.23
1,000 to 9,999	40	0.26	40	0.26	32	0.21
10,000 or more	4	0.03	8	0.05	5	0.03
West						
Under 1,000	133	0.87	104	0.67	93	0.62
1,000 to 9,999	46	0.30	80	0.51	92	0.61
10,000 or more	6	0.04	33	0.21	3	0.02

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-5. Standard errors for number and percentage of school districts by district size, by metropolitan status:
1990-91 to 1993-94

District Characteristic	School Year			
	1990-91 Number	1990-91 Percent	1993-94 Number	1993-94 Percent
TOTAL	112	0.72	72	0.48
Metro Status by District Size				
Urban-inside central city				
Under 1,000	--	--	--	--
1,000 to 9,999	27	0.18	19	0.13
10,000 or more	9	0.06	5	0.04
Urban-outside central city				
Under 1,000	132	0.85	114	0.76
1,000 to 9,999	133	0.86	85	0.57
10,000 or more	30	0.19	7	0.04
Nonurban area				
Under 1,000	95	0.61	111	0.74
1,000 to 9,999	95	0.62	65	0.43
10,000 or more	5	0.03	3	0.02

-- Too few cases for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-6. Standard errors for number and percentage of school districts by percent minority teachers, by region: 1987-88 to 1993-94

District Characteristic	School Year					
	1987-88		1990-91		1993-94	
	Number	Percent	Number	Percent	Number	Percent
TOTAL	195	1.28	112	0.72	72	0.48
Region by Percent Minority Teachers						
Northeast						
None	91	0.60	69	0.45	77	0.52
More than 0% to under 20%	51	0.33	74	0.47	80	0.53
20% or more	12	0.08	--	--	5	0.04
Midwest						
None	135	0.88	99	0.64	98	0.65
More than 0% to under 20%	54	0.36	98	0.63	71	0.47
20% or more	24	0.16	21	0.13	13	0.09
South						
None	65	0.43	56	0.36	40	0.26
More than 0% to under 20%	69	0.45	63	0.41	44	0.29
20% or more	49	0.32	39	0.25	32	0.21
West						
None	142	0.93	111	0.72	101	0.67
More than 0% to under 20%	62	0.41	93	0.60	95	0.63
20% or more	43	0.28	50	0.32	22	0.14

-- Too few cases for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-7. Standard errors for number of full and part time teachers and percentage minority, by selected district characteristics: 1987-88 to 1993-94

District Characteristic	School Year					
	1987-88		1990-91		1993-94	
	Number of Teachers	Percent Minority	Number of Teachers	Percent Minority	Number of Teachers	Percent Minority
TOTAL	20,349	0.16	56,390	0.18	20,454	0.12
District Size						
Under 1,000	7,149	0.38	14,065	0.45	5,802	0.19
1,000 to 9,999	18,815	0.34	41,616	0.26	17,496	0.21
10,000 or more	8,031	0.18	29,245	0.28	8,089	0.10
Minority Students ^a						
Under 10%	16,343	0.31	23,331	0.10	13,041	0.02
10% to under 50%	10,545	0.18	30,664	0.18	13,640	0.11
50% or more	9,097	0.45	18,707	0.39	9,175	0.32
Minority Teachers						
None	11,953	0.00	16,597	0.00	8,825	0.00
More than 0% to under 20%	16,418	0.07	40,579	0.11	20,548	0.06
20% or more	8,476	0.37	15,489	0.32	7,228	0.24
Metro Status						
Urban-inside central city	-	-	19,303	0.54	6,918	0.15
Urban-outside central city	-	-	39,288	0.33	14,236	0.20
Nonurban area	-	-	16,551	0.25	11,277	0.17
Region by Percent Minority Students ^a						
Northeast	12,643	0.24	21,971	0.31	10,404	0.23
Under 10%	11,565	0.29	18,900	0.24	8,071	0.05
10% to under 50%	7,829	0.37	9,467	0.31	5,851	0.20
50% or more	4,868	0.86	4,659	0.68	5,103	0.39
Midwest	15,151	0.53	16,465	0.27	10,784	0.23
Under 10%	13,179	0.69	12,264	0.16	9,784	0.04
10% to under 50%	4,702	0.44	9,632	0.52	6,472	0.56
50% or more	2,683	1.37	5,747	1.74	2,316	0.75
South	8,060	0.22	17,585	0.29	6,650	0.22
Under 10%	4,369	0.12	4,739	0.15	3,908	0.04
10% to under 50%	5,515	0.15	13,668	0.27	5,951	0.12
50% or more	7,403	0.96	7,748	0.59	5,143	0.54
West	7,503	0.23	34,806	0.43	12,709	0.26
Under 10%	4,205	0.32	3,675	0.16	3,514	0.07
10% to under 50%	5,814	0.30	21,918	0.23	8,729	0.15
50% or more	2,622	0.39	13,880	1.01	5,972	0.65

^a Metro status data not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-8. Standard errors for number of students and percentage minority, by selected district characteristics: 1987-88 to 1993-94

District Characteristic	School Year					
	1987-88		1990-91		1993-94	
	Number of Students	Percent Minority	Number of Students	Percent Minority	Number of Students	Percent Minority
TOTAL	192,212	0.18	947,263	0.37	353,831	0.26
District Size						
Under 1,000	67,164	0.55	83,353	0.81	83,721	0.77
1,000 to 9,999	204,990	0.31	569,585	0.66	318,051	0.53
10,000 or more	95,895	0.20	643,113	0.30	134,848	0.20
Minority Students^a						
Under 10%	185,706	0.06	293,781	0.07	221,948	0.06
10% to under 50%	137,970	0.14	551,549	0.24	236,626	0.15
50% or more	94,793	0.21	363,071	0.25	173,081	0.25
Minority Teachers						
None	144,940	0.24	178,165	0.36	144,992	0.24
More than 0% to under 20%	213,697	0.22	709,438	0.52	364,654	0.28
20% or more	116,063	0.24	282,227	0.31	126,482	0.26
Metro Status						
Urban-inside central city	-	-	205,575	0.49	115,135	0.30
Urban-outside central city	-	-	719,168	0.88	261,796	0.49
Nonurban area	-	-	281,886	0.47	182,588	0.41
Region by Percent Minority Students^a						
Northeast	98,533	0.40	190,069	0.61	153,286	0.64
Under 10%	98,042	0.10	156,793	0.13	121,287	0.11
10% to under 50%	69,909	0.67	98,443	0.80	82,937	0.45
50% or more	40,057	0.35	60,500	0.61	70,777	0.38
Midwest	132,083	0.31	234,363	0.47	189,193	0.41
Under 10%	126,356	0.09	208,553	0.10	170,850	0.08
10% to under 50%	74,445	0.30	111,407	0.72	110,213	0.50
50% or more	30,903	0.59	51,924	0.72	37,209	0.63
South	96,180	0.32	220,997	0.44	105,703	0.31
Under 10%	97,218	0.13	78,271	0.09	63,706	0.09
10% to under 50%	81,757	0.15	142,303	0.20	91,679	0.17
50% or more	74,346	0.31	147,417	0.35	79,538	0.33
West	99,332	0.33	784,962	0.78	273,472	0.64
Under 10%	60,475	0.09	74,348	0.14	70,084	0.17
10% to under 50%	88,126	0.32	510,155	0.79	188,111	0.47
50% or more	51,114	0.44	305,633	0.62	142,946	0.62

- Metro status data not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-9. Standard errors for number of full and part time teachers and percentage by race and ethnicity, by selected district characteristics: 1993-94

District Characteristic	Total Teachers	Percent by Race and Ethnicity				
		American	Indian	Asian	Hispanic	Black
TOTAL	20,454	0.006	0.017	0.087	0.100	0.118
District Size						
Under 1,000	5,802	0.062	0.061	0.097	0.119	0.194
1,000 to 9,999	17,496	0.009	0.024	0.146	0.161	0.214
10,000 or more	8,089	0.003	0.031	0.085	0.090	0.097
Minority Students^a						
Under 10%	13,041	0.008	0.009	0.010	0.009	0.023
10% to under 50%	13,640	0.009	0.020	0.040	0.115	0.111
50% or more	9,175	0.019	0.061	0.314	0.258	0.323
Minority Teachers						
None	8,825	0.000	0.000	0.000	0.000	0.000
More than 0% to under 20%	20,548	0.007	0.016	0.031	0.061	0.061
20% or more	7,228	0.022	0.062	0.317	0.283	0.238
Metro Status						
Urban-inside central city	6,918	0.005	0.034	0.115	0.162	0.152
Urban-outside central city	14,236	0.007	0.031	0.150	0.143	0.200
Nonurban area	11,277	0.019	0.009	0.124	0.131	0.166
Region by Percent Minority Students^a						
Northeast	10,404	0.006	0.015	0.074	0.162	0.225
Under 10%	8,071	0.013	0.017	0.022	0.024	0.047
10% to under 50%	5,851	0.005	0.029	0.073	0.177	0.202
50% or more	5,103	0.009	0.032	0.142	0.323	0.387
Midwest	10,784	0.009	0.009	0.019	0.213	0.227
Under 10%	9,784	0.012	0.011	0.014	0.020	0.039
10% to under 50%	6,472	0.012	0.018	0.033	0.543	0.561
50% or more	2,316	0.026	0.018	0.119	0.743	0.750
South	6,650	0.013	0.004	0.213	0.120	0.215
Under 10%	3,908	0.020	0.004	0.017	0.035	0.037
10% to under 50%	5,951	0.020	0.006	0.051	0.108	0.119
50% or more	5,143	0.027	0.008	0.636	0.443	0.537
West	12,709	0.021	0.092	0.172	0.082	0.261
Under 10%	3,514	0.037	0.051	0.046	0.011	0.071
10% to under 50%	8,729	0.026	0.067	0.107	0.045	0.145
50% or more	5,972	0.054	0.256	0.407	0.204	0.646

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-10. Standard errors for number of students and percentage by race and ethnicity, by selected district characteristics: 1993-94

District Characteristic	Total Students	Percent by Race and Ethnicity				
		American Indian	Asian	Hispanic	Black	White
TOTAL	353,831	0.023	0.064	0.233	0.173	0.259
District Size						
Under 1,000	83,721	0.157	0.122	0.652	0.312	0.769
1,000 to 9,999	318,051	0.044	0.097	0.503	0.289	0.530
10,000 or more	134,848	0.006	0.092	0.180	0.123	0.202
Minority Students^a						
Under 10%	221,948	0.013	0.021	0.029	0.027	0.057
10% to under 50%	236,626	0.040	0.085	0.206	0.207	0.153
50% or more	173,081	0.057	0.208	0.604	0.488	0.254
Minority Teachers						
None	144,992	0.107	0.037	0.096	0.137	0.242
More than 0% to under 20%	364,654	0.022	0.085	0.269	0.163	0.278
20% or more	126,482	0.035	0.181	0.546	0.463	0.258
Metro Status						
Urban-inside central city	115,135	0.011	0.110	0.249	0.250	0.301
Urban-outside central city	261,796	0.019	0.116	0.458	0.233	0.489
Nonurban area	182,588	0.083	0.022	0.340	0.269	0.415
Region by Percent Minority Students^a						
Northeast	153,286	0.030	0.093	0.282	0.368	0.642
Under 10%	121,287	0.018	0.048	0.047	0.054	0.112
10% to under 50%	82,937	0.115	0.239	0.277	0.392	0.454
50% or more	70,777	0.022	0.226	0.465	0.505	0.378
Midwest	189,193	0.069	0.083	0.089	0.372	0.415
Under 10%	170,850	0.016	0.028	0.038	0.048	0.083
10% to under 50%	110,213	0.218	0.206	0.215	0.568	0.498
50% or more	37,209	0.131	0.492	0.587	1.017	0.628
South	105,703	0.023	0.019	0.316	0.199	0.312
Under 10%	63,706	0.017	0.019	0.067	0.060	0.089
10% to under 50%	91,679	0.035	0.029	0.181	0.173	0.170
50% or more	79,538	0.045	0.042	0.861	0.683	0.326
West	273,472	0.070	0.251	0.660	0.142	0.641
Under 10%	70,084	0.052	0.056	0.114	0.017	0.167
10% to under 50%	188,111	0.079	0.211	0.375	0.131	0.469
50% or more	142,946	0.169	0.630	1.017	0.304	0.620

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-11. Standard errors for total number of full time equivalent (FTE) teachers and percentage that consists of new hires, by selected district characteristics: 1993-94

District Characteristic	Total FTE Teachers	Percent New Hires
TOTAL	19,389	0.04
District Size		
Under 1,000	5,625	0.21
1,000 to 9,999	16,684	0.08
10,000 or more	7,519	0.03
Minority Students^a		
Under 10%	12,560	0.09
10% to under 50%	13,086	0.07
50% or more	8,840	0.07
Minority Teachers		
None	8,575	0.15
More than 0% to under 20%	19,625	0.05
20% or more	7,056	0.07
Metro Status		
Urban-inside central city	6,496	0.05
Urban-outside central city	13,551	0.08
Nonurban area	10,802	0.09
Region by Metro Status		
Northeast	10,000	0.11
Urban-inside central city	4,356	0.07
Urban-outside central city	9,263	0.17
Nonurban area	3,662	0.33
Midwest	10,398	0.11
Urban-inside central city	3,451	0.08
Urban-outside central city	9,432	0.18
Nonurban area	5,732	0.15
South	6,427	0.05
Urban-inside central city	2,617	0.07
Urban-outside central city	4,581	0.08
Nonurban area	3,698	0.10
West	12,019	0.09
Urban-inside central city	3,136	0.07
Urban-outside central city	9,167	0.15
Nonurban area	4,182	0.18

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-12. Standard errors for number of newly hired FTE teachers and percentage of newly hired FTE teachers with regular state certification, newly hired FTE teachers with emergency certification, and newly hired FTE teachers lacking regular state or emergency certification in their field of assignment, by selected district characteristics: 1993-94

District Characteristic	Number of Newly Hired Teachers	Percent Newly Hired with Regular State Certification in Field of Assignment	Percent Newly Hired with Emergency Certification	Percent Newly Hired lacking Regular State or Emergency Certification in Field of Assignment
TOTAL	1815	0.21	0.14	0.14
District Size				
Under 1,000	658	1.00	0.72	0.58
1,000 to 9,999	1520	0.45	0.28	0.32
10,000 or more	706	0.19	0.11	0.11
Minority Students ^a				
Under 10%	845	0.28	0.17	0.21
10% to under 50%	1315	0.33	0.24	0.21
50% or more	973	0.53	0.34	0.38
Minority Teachers				
None	718	0.60	0.27	0.51
More than 0% to under 20%	1729	0.28	0.19	0.17
20% or more	800	0.45	0.32	0.34
Metro Status				
Urban-inside central city	542	0.34	0.31	0.17
Urban-outside central city	1368	0.30	0.24	0.23
Nonurban area	920	0.41	0.29	0.27
Region by Metro Status				
Northeast	815	0.40	0.16	0.39
Urban-inside central city	218	0.40	0.30	0.19
Urban-outside central city	783	0.60	0.20	0.62
Nonurban area	321	0.41	0.33	0.22
Midwest	757	0.31	0.15	0.30
Urban-inside central city	251	0.23	0.18	0.07
Urban-outside central city	572	0.46	0.27	0.37
Nonurban area	442	0.79	0.34	0.69
South	837	0.32	0.26	0.19
Urban-inside central city	332	0.57	0.58	0.30
Urban-outside central city	653	0.48	0.31	0.37
Nonurban area	466	0.57	0.46	0.32
West	1246	0.53	0.43	0.32
Urban-inside central city	258	0.72	0.47	0.32
Urban-outside central city	1010	0.90	0.83	0.51
Nonurban area	400	0.86	0.37	0.68

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-13. Standard errors for percentage of school districts with different criteria for considering applicants for teaching positions, by selected district characteristics: 1993-94

District Characteristic	Certification Type			College Major/Minor in Teaching Field	Graduate of Teacher Ed. Program	Special Knowledge Test	
	Full Standard	Emergency/ Temporary	District or State			National Teacher Exam	
TOTAL	0.88	0.89	0.86	1.13	0.90	0.86	
District Size							
Under 1,000	1.39	1.56	1.68	2.01	1.61	1.61	
1,000 to 9,999	0.84	1.02	1.00	0.85	1.15	1.01	
10,000 or more	0.69	0.65	0.73	0.76	0.51	0.71	
Minority Students^a							
Under 10%	0.90	1.21	1.01	1.42	1.22	1.25	
10% to under 50%	1.47	1.75	1.99	2.13	2.22	1.62	
50% or more	3.45	3.18	4.76	4.35	2.07	2.87	
Minority Teachers							
None	1.21	1.38	1.23	1.79	1.48	1.57	
More than 0% to under 20%	1.00	1.35	1.88	1.89	1.53	1.24	
20% or more	1.82	1.37	1.83	2.26	1.96	2.36	
Metro Status							
Urban-inside central city	1.84	1.45	2.14	2.54	1.98	2.60	
Urban-outside central city	1.55	1.65	2.00	1.97	1.88	1.58	
Nonurban area	1.01	1.12	1.04	1.31	1.15	1.24	
Region by Metro Status							
Northeast	1.19	1.97	1.83	1.96	1.52	1.96	
Urban-inside central city	1.13	3.22	2.96	3.21	2.94	3.66	
Urban-outside central city	1.83	2.40	2.50	2.68	2.29	2.66	
Nonurban area	1.17	3.07	2.82	2.69	2.44	2.59	
Midwest	1.19	1.36	1.29	1.88	1.55	1.87	
Urban-inside central city	2.09	3.49	1.13	4.52	4.04	3.31	
Urban-outside central city	2.19	2.60	2.43	2.51	1.72	1.25	
Nonurban area	1.39	1.98	1.54	2.27	2.25	2.67	
South	1.32	1.00	1.25	1.43	1.09	0.80	
Urban-inside central city	3.14	2.01	4.40	3.77	1.76	2.30	
Urban-outside central city	2.50	1.64	2.32	2.71	1.52	1.84	
Nonurban area	1.57	1.43	1.62	1.84	1.46	1.10	
West	2.70	2.89	4.06	3.46	3.48	2.67	
Urban-inside central city	6.47	1.25	6.35	7.54	1.85	8.24	
Urban-outside central city	4.58	4.81	8.09	7.88	7.29	5.26	
Nonurban area	3.17	3.44	3.22	2.86	3.45	2.31	

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-14. Standard errors for number and percentage of full time equivalent (FTE) teachers with standard state certification in their field of assignment, by selected district characteristics: 1993-94

District Characteristic	Total FTE Teachers	Percent
TOTAL	19,389	0.04
District Size		
Under 1,000	5,625	0.12
1,000 to 9,999	16,684	0.08
10,000 or more	7,519	0.03
Minority Students ^a		
Under 10%	12,560	0.06
10% to under 50%	13,086	0.05
50% or more	8,840	0.09
Minority Teachers		
None	8,575	0.13
More than 0% to under 20%	19,625	0.05
20% or more	7,056	0.08
Metro Status		
Urban-inside central city	6,496	0.04
Urban-outside central city	13,551	0.07
Nonurban area	10,802	0.07
Region by Metro Status		
Northeast	10,000	0.05
Urban-inside central city	4,356	0.07
Urban-outside central city	9,263	0.10
Nonurban area	3,662	0.13
Midwest	10,398	0.07
Urban-inside central city	3,451	0.04
Urban-outside central city	9,432	0.16
Nonurban area	5,732	0.07
South	6,427	0.05
Urban-inside central city	2,617	0.08
Urban-outside central city	4,581	0.09
Nonurban area	3,698	0.11
West	12,019	0.13
Urban-inside central city	3,136	0.10
Urban-outside central city	9,167	0.24
Nonurban area	4,182	0.12

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-15. Standard errors for number and percentage of full time equivalent (FTE) itinerant teachers and the number and percentage of school districts employing itinerant teachers, by selected district characteristics: 1993-94

District Characteristic	FTE Itinerant Teachers		Districts Employing Itinerant Teachers	
	Number	Percent	Number	Percent
TOTAL	1,673	0.05	185	1.24
District Size				
Under 1,000	657	0.26	114	1.64
1,000 to 9,999	1,468	0.09	118	0.99
10,000 or more	506	0.03	8	0.74
Minority Students^a				
Under 10%	942	0.09	109	1.43
10% to under 50%	874	0.07	95	2.00
50% or more	811	0.11	86	4.30
Minority Teachers				
None	751	0.17	124	1.67
More than 0% to under 20%	1,112	0.05	157	1.47
20% or more	616	0.10	34	2.30
Metro Status				
Urban-inside central city	392	0.05	14	2.93
Urban-outside central city	1,376	0.09	124	2.18
Nonurban area	696	0.08	112	1.32
Region by Metro Status				
Northeast	1,225	0.18	55	1.67
Urban-inside central city	354	0.07	6	1.81
Urban-outside central city	1,198	0.30	63	2.58
Nonurban area	294	0.25	39	2.29
Midwest	679	0.09	102	1.87
Urban-inside central city	262	0.15	10	5.24
Urban-outside central city	557	0.13	69	2.99
Nonurban area	424	0.19	74	2.16
South	455	0.04	49	1.50
Urban-inside central city	92	0.04	6	5.15
Urban-outside central city	211	0.04	22	2.60
Nonurban area	327	0.10	43	1.89
West	388	0.07	94	3.16
Urban-inside central city	104	0.08	9	8.47
Urban-outside central city	330	0.10	81	7.90
Nonurban area	184	0.17	41	2.97

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-16. Standard errors for percentage of school districts with at least one approved teaching position not filled by a permanent teacher, by selected district characteristics: 1987-88 to 1993-94

District Characteristic	School Year		
	1987-88 Percent	1990-91 Percent	1993-94 Percent
TOTAL	0.72	0.63	0.55
District Size			
Under 1,000	1.08	0.91	0.69
1,000 to 9,999	0.89	0.73	0.91
10,000 or more	0.81	1.52	0.82
Minority Students^a			
Under 10%	0.89	0.67	0.58
10% to under 50%	1.12	1.07	1.13
50% or more	2.77	3.27	3.08
Minority Teachers			
None	0.96	0.69	0.71
More than 0% to under 20%	1.00	0.99	0.90
20% or more	2.62	3.10	1.61
Metro Status			
Urban-inside central city	-	5.51	2.76
Urban-outside central city	-	1.50	1.10
Nonurban area	-	0.56	0.64
Region by Metro Status			
Northeast			
Urban-inside central city	-	5.33	3.16
Urban-outside central city	-	2.52	2.32
Nonurban area	-	2.92	1.70
Midwest			
Urban-inside central city	-	5.17	4.38
Urban-outside central city	-	2.03	1.00
Nonurban area	-	1.14	0.97
South			
Urban-inside central city	-	5.41	3.37
Urban-outside central city	-	2.03	1.70
Nonurban area	-	1.34	1.12
West			
Urban-inside central city	-	13.43	6.56
Urban-outside central city	-	5.66	4.72
Nonurban area	-	1.29	1.20

- Metro status data not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-17. Standard errors for number and percentage of approved full time equivalent (FTE) teaching positions not filled by permanent teachers, by selected district characteristics: 1987-88 to 1993-94

District Characteristic	School Year					
	1987-88		1990-91		1993-94	
	Number of Positions	Percent of Total FTE	Number of Positions	Percent of Total FTE	Number of Positions	Percent of Total FTE
TOTAL	1,495	0.07	611	0.02	190	0.01
District Size						
Under 1,000	530	0.24	224	0.10	63	0.03
1,000 to 9,999	1,345	0.12	549	0.04	166	0.01
10,000 or more	66	0.01	198	0.01	87	0.01
Minority Students^a						
Under 10%	1,077	0.12	490	0.05	83	0.01
10% to under 50%	730	0.09	204	0.02	121	0.01
50% or more	177	0.03	277	0.04	116	0.02
Minority Teachers						
None	576	0.15	232	0.06	87	0.02
More than 0% to under 20%	1,262	0.09	502	0.03	160	0.01
20% or more	461	0.07	214	0.03	86	0.01
Metro Status						
Urban-inside central city	-	-	128	0.02	62	0.01
Urban-outside central city	-	-	590	0.05	144	0.01
Nonurban area	-	-	219	0.03	78	0.01
Region by Metro Status						
Northeast	-	-	180	0.03	117	0.02
Urban-inside central city	-	-	48	0.04	21	0.02
Urban-outside central city	-	-	178	0.06	97	0.03
Nonurban area	-	-	102	0.13	39	0.05
Midwest	-	-	221	0.04	58	0.01
Urban-inside central city	-	-	42	0.03	21	0.01
Urban-outside central city	-	-	136	0.05	33	0.01
Nonurban area	-	-	187	0.10	49	0.03
South	-	-	482	0.05	68	0.01
Urban-inside central city	-	-	69	0.03	25	0.01
Urban-outside central city	-	-	454	0.12	42	0.01
Nonurban area	-	-	120	0.04	46	0.02
West	-	-	331	0.04	132	0.02
Urban-inside central city	-	-	77	0.06	48	0.03
Urban-outside central city	-	-	313	0.09	106	0.04
Nonurban area	-	-	100	0.10	24	0.02

^a Metro status data not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-18. Standard errors for number and percentage of approved full time equivalent (FTE) teaching positions abolished, withdrawn, or filled by substitute teachers because of budget cutbacks, and the number and percentage of school districts affected, by selected district characteristics: 1993-94

District Characteristic	FTE Positions		Districts Affected	
	Number	Percent	Number	Percent
TOTAL	231	0.009	102	0.681
District Size				
Under 1,000	109	0.049	95	1.242
1,000 to 9,999	191	0.015	42	0.617
10,000 or more	84	0.008	2	0.348
Minority Students^a				
Under 10%	167	0.019	44	0.520
10% to under 50%	135	0.013	40	0.911
50% or more	135	0.021	93	5.093
Minority Teachers				
None	106	0.028	42	0.592
More than 0% to under 20%	205	0.013	103	1.479
20% or more	40	0.006	9	0.852
Metro Status				
Urban-inside central city	53	0.008	7	1.260
Urban-outside central city	227	0.018	91	1.519
Nonurban area	92	0.013	41	0.457
Region by Metro Status				
Northeast	74	0.014	27	0.862
Urban-inside central city	44	0.030	3	3.008
Urban-outside central city	60	0.020	23	1.148
Nonurban area	25	0.033	13	1.346
Midwest	191	0.032	43	0.758
Urban-inside central city	33	0.027	6	3.584
Urban-outside central city	175	0.058	26	1.262
Nonurban area	66	0.033	31	0.837
South	57	0.006	20	0.593
Urban-inside central city	5	0.002	1	0.673
Urban-outside central city	32	0.008	7	0.780
Nonurban area	47	0.016	19	0.856
West	143	0.032	91	3.098
Urban-inside central city	9	0.006	1	0.923
Urban-outside central city	140	0.061	89	7.348
Nonurban area	42	0.045	18	1.178

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-19. Standard errors for number and percentage of school districts that laid off teachers and the number and percentage of full time equivalent (FTE) teachers laid off, by selected district characteristics: 1993-94

District Characteristic	Districts with Teachers Laid Off		Teachers	
	Number of Districts	Percent of All Districts	Number of FTEs Laid Off	Percent of All FTE Teachers
TOTAL	74	0.476	431	0.017
District Size				
Under 1,000	65	0.853	136	0.059
1,000 to 9,999	45	0.664	358	0.031
10,000 or more	3	0.441	199	0.018
Minority Students^a				
Under 10%	62	0.652	244	0.028
10% to under 50%	47	0.968	307	0.029
50% or more	26	1.468	142	0.021
Minority Teachers				
None	75	0.968	165	0.045
More than 0% to under 20%	40	0.591	406	0.026
20% or more	15	1.187	108	0.017
Metro Status				
Urban-inside central city	8	1.473	117	0.019
Urban-outside central city	45	0.777	490	0.039
Nonurban area	61	0.696	159	0.022
Region by Metro Status				
Northeast	37	1.195	110	0.020
Urban-inside central city	3	2.794	11	0.012
Urban-outside central city	30	1.492	101	0.032
Nonurban area	19	1.861	23	0.032
Midwest	63	1.098	438	0.069
Urban-inside central city	6	3.469	100	0.077
Urban-outside central city	44	2.231	514	0.162
Nonurban area	53	1.389	132	0.063
South	24	0.724	60	0.006
Urban-inside central city	3	1.641	6	0.002
Urban-outside central city	7	0.846	28	0.007
Nonurban area	23	1.026	49	0.017
West	27	0.924	119	0.023
Urban-inside central city	1	1.614	53	0.042
Urban-outside central city	14	1.290	89	0.035
Nonurban area	22	1.478	50	0.051

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-20. Standard errors for percentage of school districts using pay incentives to recruit or retain teachers to teach in less desirable locations or in fields of shortage, by selected district characteristics: 1987-88 to 1993-94

District Characteristic	School Year		
	1987-88 Percent	1990-91 Percent	1993-94 Percent
TOTAL	0.46	0.69	0.68
District Size			
Under 1,000	0.83	1.04	0.99
1,000 to 9,999	0.37	0.74	0.75
10,000 or more	0.50	1.06	0.80
Minority Students^a			
Under 10%	0.61	1.02	0.79
10% to under 50%	0.85	1.37	1.39
50% or more	1.76	3.19	3.33
Minority Teachers			
None	0.74	1.13	1.11
More than 0% to under 20%	0.57	0.85	1.08
20% or more	1.42	3.43	1.79
Metro Status			
Urban-inside central city	-	1.99	1.97
Urban-outside central city	-	1.32	1.37
Nonurban area	-	0.94	0.76
Region by District Size			
Northeast	0.98	1.37	1.12
Under 1,000	2.16	2.35	2.11
1,000 to 9,999	0.77	1.66	1.23
10,000 or more	1.53	2.20	2.88
Midwest	0.78	1.09	1.08
Under 1,000	1.17	1.65	1.66
1,000 to 9,999	0.82	0.98	0.99
10,000 or more	0.18	1.22	0.62
South	1.02	1.48	1.46
Under 1,000	2.06	3.09	3.08
1,000 to 9,999	1.02	1.51	1.05
10,000 or more	0.70	1.19	0.64
West	1.35	1.63	1.99
Under 1,000	2.24	2.56	1.99
1,000 to 9,999	1.03	2.19	3.42
10,000 or more	1.14	2.34	1.84

- Metro status data not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-21. Standard errors for percentage of school districts using pay incentives to recruit or retain teachers to teach in less desirable locations by type of pay incentive, by selected district characteristics: 1993-94

District Characteristic	Any Incentive	Cash Bonus	Type of Pay Incentive	
			Salary Step. Increase	Other Salary Increase
TOTAL	0.64	0.36	0.46	0.34
District Size				
Under 1,000	0.97	0.46	0.83	0.62
1,000 to 9,999	0.70	0.60	0.43	0.29
10,000 or more	0.39	0.18	0.15	0.33
Minority Students^a				
Under 10%	0.76	0.19	0.76	0.27
10% to under 50%	1.25	0.76	0.69	0.97
50% or more	3.25	2.57	1.23	1.29
Minority Teachers				
None	1.04	0.34	0.87	0.49
More than 0% to under 20%	0.97	0.68	0.57	0.61
20% or more	1.42	0.99	1.20	0.73
Metro Status				
Urban-inside central city	1.81	0.18	1.76	0.89
Urban-outside central city	1.21	0.75	0.87	0.28
Nonurban area	0.71	0.34	0.64	0.56
Region by District Size				
Northeast	1.09	0.23	1.01	0.22
Under 1,000	2.00	0.28	2.06	0.30
1,000 to 9,999	1.21	0.31	0.98	0.31
10,000 or more	0.00	0.00	0.00	0.00
Midwest	0.99	0.20	0.95	0.28
Under 1,000	1.59	0.31	1.56	0.46
1,000 to 9,999	0.65	0.21	0.63	0.23
10,000 or more	0.13	0.00	0.13	0.03
South	1.48	0.99	0.75	1.16
Under 1,000	3.17	2.36	1.47	2.72
1,000 to 9,999	1.17	0.69	0.91	0.92
10,000 or more	0.49	0.42	0.29	0.33
West	1.77	1.38	0.86	1.02
Under 1,000	1.98	0.39	1.30	1.66
1,000 to 9,999	3.49	3.62	0.95	0.63
10,000 or more	0.98	0.20	0.25	0.87

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-22. Standard errors for percentage of school districts using pay incentives to recruit or retain teachers to teach in fields of shortage by type of pay incentive, by selected district characteristics: 1993-94

District Characteristic	Any Incentive	Type of Pay Incentive		
		Cash Bonus	Salary Step Increase	Other Salary Increase
TOTAL	0.62	0.32	0.44	0.30
District Size				
Under 1,000	0.83	0.36	0.74	0.51
1,000 to 9,999	0.74	0.60	0.38	0.34
10,000 or more	0.84	0.53	0.31	0.61
Minority Students ^a				
Under 10%	0.73	0.14	0.69	0.31
10% to under 50%	1.11	0.65	0.58	0.65
50% or more	3.29	2.53	0.64	1.58
Minority Teachers				
None	0.98	0.24	0.84	0.45
More than 0% to under 20%	0.90	0.62	0.44	0.53
20% or more	1.50	0.80	0.66	1.06
Metro Status				
Urban-inside central city	1.75	0.73	1.15	1.04
Urban-outside central city	1.36	0.70	0.88	0.41
Nonurban area	0.68	0.28	0.42	0.50
Region by District Size				
Northeast	0.95	0.08	0.93	0.20
Under 1,000	2.09	0.00	2.08	0.31
1,000 to 9,999	0.78	0.13	0.78	0.26
10,000 or more	2.88	0.13	2.95	1.40
Midwest	0.93	0.15	0.88	0.41
Under 1,000	1.32	0.15	1.34	0.64
1,000 to 9,999	1.02	0.35	0.83	0.46
10,000 or more	0.58	0.06	0.48	0.23
South	1.27	0.84	0.34	1.17
Under 1,000	2.69	1.84	0.63	2.53
1,000 to 9,999	0.82	0.64	0.54	0.80
10,000 or more	0.66	0.52	0.36	0.61
West	1.92	1.38	0.61	0.98
Under 1,000	1.31	0.40	0.85	1.04
1,000 to 9,999	3.61	3.57	1.19	1.36
10,000 or more	1.91	1.33	0.09	1.51

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-23. Standard errors for percentage of school districts using pay incentives to recruit or retain teachers to fields of shortage by subject matter, by selected district characteristics: 1993-94

District Characteristic	Subject Matter									
	Special Education	Math	Comp. Sci.	Physical Science	Biological Sciences	ESL or Bilingual Education	Foreign Language	Vocational Education	Other	
TOTAL	0.45	0.39	0.25	0.34	0.33	0.39	0.28	0.31	0.12	
District Size										
Under 1,000	0.64	0.67	0.43	0.55	0.57	0.39	0.42	0.55	0.20	
1,000 to 9,999	0.68	0.34	0.25	0.34	0.32	0.70	0.33	0.29	0.19	
10,000 or more	0.40	0.17	0.13	0.17	0.14	0.77	0.10	0.13	0.11	
Minority Students ^a										
Under 10%	0.55	0.53	0.31	0.38	0.45	0.26	0.33	0.48	0.17	
10% to under 50%	0.73	0.78	0.57	0.70	0.70	0.74	0.63	0.57	0.24	
50% or more	2.89	1.49	0.51	1.30	0.93	2.99	0.79	0.63	0.20	
Minority Teachers										
None	0.72	0.70	0.38	0.44	0.59	0.32	0.42	0.59	0.20	
More than 0% to under 20%	0.83	0.53	0.39	0.49	0.42	0.73	0.38	0.37	0.18	
20% or more	1.06	0.66	0.52	0.62	0.66	1.19	1.01	0.73	0.25	
Metro Status										
Urban-inside central city	1.68	0.41	0.33	0.41	0.38	1.29	0.28	0.37	0.20	
Urban-outside central city	0.90	0.59	0.25	0.37	0.34	0.84	0.36	0.55	0.16	
Nonurban area	0.57	0.50	0.39	0.47	0.52	0.36	0.37	0.40	0.18	
Region by District Size										
Northeast	0.81	0.80	0.24	0.43	0.29	0.28	0.24	0.29	0.25	
Under 1,000	1.95	1.94	0.26	0.60	0.26	0.51	0.00	0.34	0.40	
1,000 to 9,999	0.60	0.25	0.33	0.51	0.47	0.33	0.39	0.45	0.36	
10,000 or more	2.64	0.28	0.00	0.28	0.28	0.27	0.00	0.35	1.44	
Midwest	0.62	0.60	0.40	0.47	0.57	0.33	0.46	0.67	0.26	
Under 1,000	0.96	0.84	0.62	0.71	0.80	0.53	0.65	1.05	0.37	
1,000 to 9,999	0.73	0.62	0.42	0.51	0.50	0.42	0.58	0.46	0.50	
10,000 or more	0.37	0.32	0.00	0.32	0.32	0.00	0.00	0.21	0.03	
South	0.99	0.93	0.62	1.07	0.94	0.73	0.64	0.69	0.18	
Under 1,000	1.87	2.05	1.36	2.38	2.25	1.51	1.39	1.40	0.28	
1,000 to 9,999	0.73	0.71	0.55	0.63	0.64	0.84	0.57	0.63	0.27	
10,000 or more	0.62	0.36	0.30	0.36	0.29	0.66	0.09	0.30	0.10	
West	1.53	0.44	0.42	0.42	0.49	1.66	0.57	0.42	0.26	
Under 1,000	1.14	0.67	0.63	0.64	0.71	0.55	0.55	0.62	0.43	
1,000 to 9,999	3.44	0.74	0.72	0.76	0.76	3.78	1.19	0.72	0.30	
10,000 or more	0.70	0.01	0.01	0.01	0.01	1.92	0.28	0.02	0.01	

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-24. Standard errors for percentage of school districts in which free training is offered to prepare staff members to teach in fields with current or anticipated shortages, by selected district characteristics: 1987-88 to 1993-94

District Characteristic	School Year		
	1987-88 Percent	1990-91 Percent	1993-94 Percent
TOTAL	0.59	0.52	0.84
District Size			
Under 1,000	0.91	0.78	1.38
1,000 to 9,999	0.54	0.55	1.00
10,000 or more	0.46	1.56	0.74
Minority Students^a			
Under 10%	0.56	0.47	1.12
10% to under 50%	1.19	1.44	1.21
50% or more	2.75	2.61	3.91
Minority Teachers			
None	0.77	0.72	1.28
More than 0% to under 20%	0.68	0.74	1.51
20% or more	2.92	2.79	2.10
Metro Status			
Urban-inside central city	-	3.43	2.42
Urban-outside central city	-	1.06	1.59
Nonurban area	-	0.69	1.14
Region by District Size			
Northeast	1.06	0.92	1.36
Under 1,000	2.07	1.83	2.80
1,000 to 9,999	1.16	1.08	1.51
10,000 or more	2.21	4.23	2.44
Midwest	0.83	0.84	1.73
Under 1,000	1.17	1.27	2.71
1,000 to 9,999	0.78	0.64	0.97
10,000 or more	0.55	1.03	0.92
South	1.30	1.10	1.28
Under 1,000	2.14	1.99	2.88
1,000 to 9,999	1.52	1.43	1.54
10,000 or more	0.71	1.03	0.83
West	1.97	1.96	3.22
Under 1,000	3.30	2.34	4.02
1,000 to 9,999	1.35	2.18	3.99
10,000 or more	0.92	3.40	1.74

^a Metro status data not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-25. Standard errors for percentage of school districts in which free training is offered to prepare staff members to teach in fields of current or anticipated shortage by subject matter, by selected district characteristics: 1993-94

District Characteristic	Subject Matter									
	Special Education	Math	Comp. Sci.	Physical Science	Biological Sciences	Bilingual Education	Foreign Language	Vocational Education	Other	
TOTAL	0.69	0.72	0.77	0.66	0.68	0.73	0.52	0.53	0.22	
District Size										
Under 1,000	1.16	1.20	1.26	1.11	1.12	1.18	0.89	0.95	--	
1,000 to 9,999	0.71	0.67	0.64	0.60	0.56	0.91	0.49	0.46	0.11	
10,000 or more	0.51	0.52	0.74	0.47	0.47	0.75	0.63	0.50	--	
Minority Students^a										
Under 10%	0.96	1.10	1.05	1.00	1.00	0.94	0.79	0.79	--	
10% to under 50%	1.00	0.99	1.01	1.05	1.05	1.11	0.89	0.92	--	
50% or more	1.76	3.05	1.46	3.24	3.26	3.85	1.19	1.19	--	
Minority Teachers										
None	1.18	1.22	1.22	1.17	1.19	1.17	0.94	0.92	--	
More than 0% to under 20%	0.85	1.20	0.90	1.13	1.15	1.30	0.68	0.63	--	
20% or more	1.82	1.54	1.79	1.28	1.36	1.59	1.05	1.28	--	
Metro Status										
Urban-inside central city	1.04	0.74	1.06	0.76	0.94	2.32	0.64	1.08	--	
Urban-outside central city	0.86	1.24	0.91	1.11	1.12	1.31	0.57	0.50	--	
Nonurban area	1.08	1.07	1.12	1.09	1.08	1.10	0.94	0.97	--	
Region by District Size										
Northeast	1.15	1.26	1.16	0.91	0.80	0.94	0.74	0.76	--	
Under 1,000	2.05	--	--	--	--	--	--	--	--	
1,000 to 9,999	1.31	1.36	1.25	1.36	1.23	1.14	--	1.13	--	
10,000 or more	--	--	--	--	--	--	--	--	--	
Midwest	1.50	1.53	1.63	1.46	1.48	1.59	1.26	1.19	--	
Under 1,000	2.39	2.37	2.49	2.34	2.37	--	1.95	1.90	--	
1,000 to 9,999	0.94	1.00	0.89	0.90	0.89	--	--	0.90	--	
10,000 or more	0.82	--	--	--	--	--	--	--	--	
South	1.27	1.17	1.11	1.10	1.09	1.29	1.00	1.01	--	
Under 1,000	2.74	2.44	2.47	2.29	2.24	2.78	--	2.16	--	
1,000 to 9,999	1.15	1.06	0.74	0.92	1.01	1.28	0.85	0.62	--	
10,000 or more	0.72	0.67	0.67	0.67	0.67	0.76	0.63	0.64	--	
West	2.03	2.22	2.00	2.25	2.35	2.94	1.34	1.23	--	
Under 1,000	3.05	3.74	2.98	3.78	3.85	--	--	2.02	--	
1,000 to 9,999	2.47	2.15	2.28	2.16	1.80	4.07	1.86	1.27	--	
10,000 or more	1.54	1.35	2.02	0.93	0.93	1.76	1.76	--	--	

-- Too few cases for a reliable estimate.

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-26. Standard errors for average low and high salary for full time teachers in actual and in constant 1993-94 dollars, by selected district characteristics: 1990-91 to 1993-94^a

District Characteristic	School Year					
	1990-91		1990-91		1993-94	
	Actual Dollars Low	Actual Dollars High	Constant 1993-94 Dollars ^b Low	Constant 1993-94 Dollars ^b High	Actual Dollars Low	Actual Dollars High
TOTAL	42	133	46	145	63	148
District Size						
Under 1,000	89	214	97	234	111	275
1,000 to 9,999	72	186	79	203	67	158
10,000 or more	154	349	169	381	46	142
Minority Students^c						
Under 10%	56	199	61	217	77	210
10% to under 50%	111	355	121	388	149	313
50% or more	175	433	191	472	221	444
Minority Teachers						
None	85	246	92	269	114	241
More than 0% to under 20%	102	248	111	270	126	264
20% or more	168	453	184	495	110	358
Metro Status						
Urban-inside central city	193	651	211	711	140	355
Urban-outside central city	89	250	97	273	116	250
Nonurban area	63	158	69	173	65	196
Region by Metro Status						
Northeast	102	257	112	281	119	342
Urban-inside central city	335	702	366	767	221	691
Urban-outside central city	168	381	183	416	159	484
Nonurban area	105	256	114	280	142	307
Midwest	80	209	88	228	78	321
Urban-inside central city	182	391	198	427	178	412
Urban-outside central city	136	401	149	438	164	459
Nonurban area	96	259	105	283	87	344
South	65	77	71	84	38	83
Urban-inside central city	144	314	157	343	143	584
Urban-outside central city	116	215	127	235	96	158
Nonurban area	98	104	107	114	40	91
West	112	347	123	379	200	353
Urban-inside central city	402	2,235	438	2,440	385	310
Urban-outside central city	305	667	333	728	434	710
Nonurban area	179	431	195	471	224	513

a) In districts with salary schedules, the low salary corresponds to bachelor's degree with no teaching experience and high is equivalent to maximum scheduled salary. Districts without salary schedule reported their lowest and highest base salaries for the year.

b) Adjusted using the Consumer Price Index.

c) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-27. Standard errors for average scheduled salary for teachers (in constant 1993-94 dollars) by education and teaching experience for school districts with salary schedules, by selected district characteristics: 1990-91 and 1993-94

District Characteristic	1990-91 (Constant 1993-94 Dollars) ^a			1993-94 (Actual Dollars)		
	Bachelor's without Experience	Master's without Experience	Master's with 20 yrs Experience	Bachelor's without Experience	Master's without Experience	Master's with 20 yrs Experience
TOTAL	65	81	137	60	63	110
District Size						
Under 1,000	115	128	204	118	136	268
1,000 to 9,999	82	91	178	68	81	147
10,000 or more	170	217	330	47	53	126
Minority Students ^b						
Under 10%	85	99	180	86	96	217
10% to under 50%	108	137	265	141	122	267
50% or more	191	206	348	226	356	608
Minority Teachers						
None	110	127	224	108	118	256
More than 0% to under 20%	109	135	241	128	146	270
20% or more	186	236	422	113	130	293
Metro Status						
Urban-inside central city	211	283	602	144	134	364
Urban-outside central city	95	118	209	122	127	223
Nonurban area	86	99	167	56	61	127
Region by Metro Status						
Northeast	84	109	252	128	159	317
Urban-inside central city	371	405	586	231	279	608
Urban-outside central city	133	172	409	169	213	401
Nonurban area	121	110	225	159	176	351
Midwest						
Urban-inside central city	110	128	266	85	92	192
Urban-outside central city	198	190	548	181	159	532
Nonurban area	153	176	454	156	174	398
South						
Urban-inside central city	126	147	261	85	94	200
Urban-outside central city	74	86	89	39	42	70
Nonurban area	157	201	279	145	160	427
West						
Urban-inside central city	127	171	176	96	108	196
Urban-outside central city	109	123	120	42	42	68
Nonurban area	147	221	287	191	201	330
	438	1,050	1,851	389	270	538
	335	438	527	438	456	704
	175	219	348	130	123	250

a) Adjusted using the Consumer Price Index.

b) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-28. Standard errors for number and percentage of school districts with collective bargaining units, by selected district characteristics: 1993-94

District Characteristic	Number	Percent
TOTAL	150	0.87
District Size		
Under 1,000	156	1.66
1,000 to 9,999	109	0.69
10,000 or more	7	0.59
Minority Students^a		
Under 10%	123	1.08
10% to under 50%	113	1.40
50% or more	79	4.12
Minority Teachers		
None	163	1.38
More than 0% to under 20%	166	1.44
20% or more	27	1.95
Metro Status		
Urban-inside central city	22	1.26
Urban-outside central city	115	1.53
Nonurban area	129	1.18
Region by Metro Status		
Northeast	25	0.41
Urban-inside central city	6	1.47
Urban-outside central city	45	0.44
Nonurban area	38	1.04
Midwest	106	1.61
Urban-inside central city	13	0.74
Urban-outside central city	58	1.62
Nonurban area	102	2.47
South	18	0.55
Urban-inside central city	10	4.52
Urban-outside central city	8	1.02
Nonurban area	11	0.50
West	108	3.65
Urban-inside central city	15	0.73
Urban-outside central city	92	7.49
Nonurban area	70	3.40

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-29. Standard errors for average scheduled salary for teachers by education and teaching experience in school districts with and without collective bargaining units, by selected district characteristics: 1993-94

District Characteristic	With Collective Bargaining Units			Without Collective Bargaining Units		
	Bachelor's without Experience	Master's without Experience	Master's with 20 yrs Experience	Bachelor's without Experience	Master's without Experience	Master's with 20 yrs Experience
TOTAL	94	93	173	104	155	296
District Size						
Under 1,000	169	180	341	202	298	584
1,000 to 9,999	82	91	191	76	91	174
10,000 or more	69	81	167	31	32	62
Minority Students^a						
Under 10%	109	122	279	114	149	289
10% to under 50%	223	174	383	109	128	205
50% or more	232	298	465	385	649	1,215
Minority Teachers						
None	132	146	329	143	188	356
More than 0% to under 20%	162	160	334	186	291	537
20% or more	260	289	626	91	98	199
Metro Status						
Urban-inside central city	181	164	517	170	191	256
Urban-outside central city	150	141	255	295	478	894
Nonurban area	84	88	197	69	87	174
Region by Metro Status						
Northeast	132	162	321	1,313	1,803	3,829
Urban-inside central city	225	274	623	--	--	--
Urban-outside central city	170	214	400	--	--	--
Nonurban area	169	184	353	--	--	--
Midwest	107	120	253	174	181	361
Urban-inside central city	192	170	548	--	--	--
Urban-outside central city	175	197	425	430	424	897
Nonurban area	111	121	259	175	183	308
South	47	49	186	49	52	78
Urban-inside central city	181	127	1,716	180	203	241
Urban-outside central city	84	89	273	118	132	237
Nonurban area	72	86	212	47	49	72
West	248	214	360	416	604	1,179
Urban-inside central city	397	274	560	--	--	--
Urban-outside central city	494	431	679	839	1,419	3,017
Nonurban area	182	150	353	157	260	590

-- Too few cases for a reliable estimate.

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-30. Standard errors for number and percentage of school districts offering retirement plans to teachers, by selected district characteristics: 1987-88 to 1993-94

District Characteristic	School Year					
	1987-88		1990-91		1993-94	
	Number	Percent	Number	Percent	Number	Percent
TOTAL	202	0.27	134	0.48	80	0.27
District Size						
Under 1,000	216	0.52	178	0.87	135	0.52
1,000 to 9,999	75	0.09	166	0.15	117	0.12
10,000 or more	9	0.00	37	0.10	8	0.00
Minority Students^a						
Under 10%	185	0.38	168	0.22	128	0.44
10% to under 50%	99	0.48	143	0.23	128	0.15
50% or more	124	0.25	84	4.48	117	0.05
Minority Teachers						
None	233	0.50	183	0.92	196	0.57
More than 0% to under 20%	113	0.21	160	0.23	181	0.22
20% or more	71	0.16	57	0.32	45	0.07
Metro Status						
Urban-inside central city	--	--	50	9.82	23	0.00
Urban-outside central city	--	--	130	0.15	89	0.26
Nonurban area	--	--	110	0.29	111	0.45
Region by Metro Status						
Northeast	--	--	20	0.16	22	0.44
Urban-inside central city	--	--	16	0.00	7	0.00
Urban-outside central city	--	--	44	0.24	45	0.53
Nonurban area	--	--	33	0.16	39	0.80
Midwest	--	--	105	0.25	66	0.58
Urban-inside central city	--	--	13	0.46	13	0.00
Urban-outside central city	--	--	76	0.45	59	0.49
Nonurban area	--	--	75	0.33	82	0.89
South	--	--	54	0.45	14	0.07
Urban-inside central city	--	--	12	0.00	10	0.00
Urban-outside central city	--	--	33	0.00	11	0.00
Nonurban area	--	--	55	0.65	17	0.11
West	--	--	76	2.33	20	0.51
Urban-inside central city	--	--	44	25.92	15	0.00
Urban-outside central city	--	--	87	0.10	59	0.01
Nonurban area	--	--	75	0.94	61	0.92

^a Metro status data not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-31. Standard errors for percentage of school districts with retirement plans that permit teachers full or partial credit for teaching experience obtained in another school district **within-state** and **outside-the-state**, by selected district characteristics: 1993-94

District Characteristic	<u>Within-State</u>		<u>Outside-the-State</u>	
	Full Credit	Partial Credit	Full Credit	Partial Credit
TOTAL	0.32	0.24	1.15	0.83
District Size				
Under 1,000	0.52	0.42	1.99	1.54
1,000 to 9,999	0.40	0.31	1.12	0.83
10,000 or more	0.20	--	0.48	0.70
Minority Students^a				
Under 10%	0.52	0.40	1.56	1.25
10% to under 50%	0.44	--	1.38	1.36
50% or more	0.49	--	2.77	1.79
Minority Teachers				
None	0.57	0.49	1.68	1.40
More than 0% to under 20%	0.37	0.28	1.31	0.95
20% or more	0.45	--	1.69	1.73
Metro Status				
Urban-inside central city	0.22	--	1.96	1.95
Urban-outside central city	0.40	0.30	1.95	1.23
Nonurban area	0.46	0.41	1.32	1.17
Region by Metro Status				
Northeast	0.58	--	2.02	1.54
Urban-inside central city	0.00	0.00	3.05	2.68
Urban-outside central city	0.75	--	2.72	2.21
Nonurban area	0.75	--	3.26	2.25
Midwest	0.74	0.60	1.71	1.79
Urban-inside central city	0.62	--	4.23	3.66
Urban-outside central city	0.84	--	2.32	2.58
Nonurban area	1.03	0.94	2.29	2.41
South	0.20	--	1.13	1.00
Urban-inside central city	0.03	--	3.10	3.84
Urban-outside central city	0.12	--	2.18	2.10
Nonurban area	0.29	--	1.54	1.29
West	0.53	0.43	3.20	1.75
Urban-inside central city	0.54	--	--	0.77
Urban-outside central city	0.79	--	6.81	1.41
Nonurban area	0.72	0.51	2.76	2.61

-- Too few cases for a reliable estimate.

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-32. Standard errors for number and percentage of school districts allowing teachers to purchase credit toward retirement plan for experience obtained in other school districts **within-state** and **outside-the-state**, by selected district characteristics: 1993-94

District Characteristic	Within-State		Outside-the-State	
	Number	Percent	Number	Percent
TOTAL	69.0	0.46	136.4	0.93
District Size				
Under 1,000	66.8	0.89	151.8	1.62
1,000 to 9,999	41.5	0.59	76.7	0.92
10,000 or more	3.7	0.52	5.4	0.86
Minority Students^a				
Under 10%	57.4	0.65	142.5	1.25
10% to under 50%	56.3	1.19	81.5	1.88
50% or more	23.4	1.62	38.6	2.67
Minority Teachers				
None	55.7	0.76	174.7	1.58
More than 0% to under 20%	55.5	0.82	117.8	1.31
20% or more	17.3	1.50	30.9	2.06
Metro Status				
Urban-inside central city	14.5	2.38	17.1	0.60
Urban-outside central city	50.6	0.88	113.5	1.45
Nonurban area	46.9	0.56	125.3	1.35
Region by Metro Status				
Northeast	29.4	0.98	50.6	1.60
Urban-inside central city	0.3	1.15	4.8	2.37
Urban-outside central city	26.6	1.39	49.5	1.76
Nonurban area	19.5	1.77	43.3	2.47
Midwest	40.6	0.75	98.6	1.88
Urban-inside central city	1.8	1.32	13.1	0.75
Urban-outside central city	18.7	0.97	57.9	2.61
Nonurban area	34.6	0.98	102.3	2.85
South	34.6	1.05	38.2	1.36
Urban-inside central city	0.0	0.13	10.7	1.23
Urban-outside central city	13.7	1.54	18.4	2.48
Nonurban area	30.8	1.39	35.3	1.67
West	49.7	1.70	94.2	3.30
Urban-inside central city	13.7	8.25	0.2	2.53
Urban-outside central city	47.8	4.07	79.8	8.37
Nonurban area	24.3	1.62	56.5	3.15

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-33. Standard errors for average number of years of credit required in English, mathematics, social science, physical/biological science, computer science, and foreign language for high school graduation in school districts with 4-year programs, by selected district characteristics: 1990-91 to 1993-94

District Characteristic	School Year	
	1990-91 Number of Years	1993-94 Number of Years
TOTAL	0.04	0.03
District Size		
Under 1,000	0.09	0.07
1,000 to 9,999	0.05	0.04
10,000 or more	0.07	0.03
Minority Students^a		
Under 10%	0.05	0.04
10% to under 50%	0.09	0.06
50% or more	0.11	0.10
Minority Teachers		
None	0.09	0.06
More than 0% to under 20%	0.05	0.05
20% or more	0.15	0.07
Metro Status		
Urban-inside central city	0.14	0.06
Urban-outside central city	0.07	0.05
Nonurban area	0.06	0.04
Region by Metro Status		
Northeast	0.11	0.07
Urban-inside central city	0.39	0.14
Urban-outside central city	0.14	0.08
Nonurban area	0.16	0.14
Midwest	0.06	0.06
Urban-inside central city	0.13	0.11
Urban-outside central city	0.12	0.08
Nonurban area	0.07	0.08
South	0.10	0.05
Urban-inside central city	0.22	0.11
Urban-outside central city	0.11	0.10
Nonurban area	0.13	0.06
West	0.09	0.07
Urban-inside central city	0.33	0.06
Urban-outside central city	0.12	0.13
Nonurban area	0.11	0.07

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-34. Standard errors for average number of years of English required for high school graduation in school districts with 4-year programs, by selected district characteristics: 1987-88 to 1993-94

District Characteristic	School Year		
	1987-88 Number of Years	1990-91 Number of Years	1993-94 Number of Years
TOTAL	0.009	0.011	0.008
District Size			
Under 1,000	0.019	0.023	0.014
1,000 to 9,999	0.007	0.011	0.010
10,000 or more	0.009	0.024	0.005
Minority Students^a			
Under 10%	0.012	0.012	0.010
10% to under 50%	0.014	0.026	0.008
50% or more	0.019	0.028	0.029
Minority Teachers			
None	0.016	0.022	0.014
More than 0% to under 20%	0.013	0.010	0.011
20% or more	0.013	0.035	0.013
Metro Status			
Urban-inside central city	-	0.031	0.014
Urban-outside central city	-	0.014	0.015
Nonurban area	-	0.015	0.010
Region by Metro Status			
Northeast			
Urban-inside central city	-	0.001	0.005
Urban-outside central city	-	0.022	0.012
Nonurban area	-	0.041	0.008
Midwest			
Urban-inside central city	-	0.065	0.034
Urban-outside central city	-	0.030	0.024
Nonurban area	-	0.022	0.021
South			
Urban-inside central city	-	0.008	0.000
Urban-outside central city	-	0.009	0.002
Nonurban area	-	0.039	0.004
West			
Urban-inside central city	-	0.120	0.036
Urban-outside central city	-	0.031	0.055
Nonurban area	-	0.016	0.011

^a Metro status data not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-35. Standard errors for average number of years of mathematics required for high school graduation in school districts with 4-year programs, by selected district characteristics: 1987-88 to 1993-94

District Characteristic	School Year		
	1987-88 Number of Years	1990-91 Number of Years	1993-94 Number of Years
TOTAL	0.011	0.012	0.009
District Size			
Under 1,000	0.019	0.024	0.018
1,000 to 9,999	0.014	0.013	0.012
10,000 or more	0.008	0.024	0.008
Minority Students^a			
Under 10%	0.015	0.015	0.013
10% to under 50%	0.022	0.024	0.017
50% or more	0.032	0.029	0.033
Minority Teachers			
None	0.019	0.021	0.019
More than 0% to under 20%	0.017	0.015	0.014
20% or more	0.039	0.035	0.025
Metro Status			
Urban-inside central city	-	0.050	0.015
Urban-outside central city	-	0.019	0.014
Nonurban area	-	0.016	0.012
Region by Metro Status			
Northeast			
Urban-inside central city	-	0.137	0.052
Urban-outside central city	-	0.031	0.027
Nonurban area	-	0.035	0.038
Midwest			
Urban-inside central city	-	0.024	0.028
Urban-outside central city	-	0.032	0.021
Nonurban area	-	0.024	0.021
South			
Urban-inside central city	-	0.022	0.011
Urban-outside central city	-	0.032	0.022
Nonurban area	-	0.025	0.015
West			
Urban-inside central city	-	0.227	0.020
Urban-outside central city	-	0.042	0.037
Nonurban area	-	0.034	0.033

^a Metro status data not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-36. Standard errors for average number of years of social science required for high school graduation in school districts with 4-year programs, by selected district characteristics: 1987-88 to 1993-94

District Characteristic	School Year		
	1987-88 Number of Years	1990-91 Number of Years	1993-94 Number of Years
TOTAL	0.013	0.014	0.010
District Size			
Under 1,000	0.023	0.029	0.022
1,000 to 9,999	0.014	0.018	0.012
10,000 or more	0.009	0.024	0.007
Minority Students^a			
Under 10%	0.016	0.018	0.014
10% to under 50%	0.025	0.025	0.021
50% or more	0.036	0.030	0.033
Minority Teachers			
None	0.023	0.027	0.021
More than 0% to under 20%	0.014	0.016	0.014
20% or more	0.025	0.037	0.018
Metro Status			
Urban-inside central city	-	0.043	0.021
Urban-outside central city	-	0.020	0.018
Nonurban area	-	0.019	0.015
Region by Metro Status			
Northeast			
Urban-inside central city	-	0.032	0.020
Urban-outside central city	-	0.172	0.061
Nonurban area	-	0.041	0.026
West	-	0.055	0.039
Midwest			
Urban-inside central city	-	0.023	0.023
Urban-outside central city	-	0.060	0.042
Nonurban area	-	0.036	0.031
South	-	0.029	0.031
Urban-inside central city	-	0.024	0.015
Urban-outside central city	-	0.067	0.035
Nonurban area	-	0.036	0.023
Urban-inside central city	-	0.030	0.020
West			
Urban-inside central city	-	0.037	0.038
Urban-outside central city	-	0.072	0.027
Nonurban area	-	0.058	0.066
Urban-inside central city	-	0.045	0.037

^a Metro status data not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-37. Standard errors for average number of years of physical and biological sciences required for high school graduation in school districts with 4-year programs, by selected district characteristics: 1987-88 to 1993-94

District Characteristic	School Year		
	1987-88 Number of Years	1990-91 Number of Years	1993-94 Number of Years
TOTAL	0.012	0.012	0.011
District Size			
Under 1,000	0.023	0.021	0.023
1,000 to 9,999	0.014	0.013	0.012
10,000 or more	0.006	0.021	0.008
Minority Students^a			
Under 10%	0.015	0.012	0.015
10% to under 50%	0.019	0.025	0.016
50% or more	0.026	0.028	0.031
Minority Teachers			
None	0.019	0.022	0.022
More than 0% to under 20%	0.015	0.014	0.013
20% or more	0.025	0.038	0.025
Metro Status			
Urban-inside central city	-	0.038	0.016
Urban-outside central city	-	0.020	0.019
Nonurban area	-	0.016	0.017
Region by Metro Status			
Northeast	-	0.026	0.023
Urban-inside central city	-	0.118	0.051
Urban-outside central city	-	0.038	0.035
Nonurban area	-	0.035	0.037
Midwest	-	0.015	0.022
Urban-inside central city	-	0.046	0.039
Urban-outside central city	-	0.032	0.032
Nonurban area	-	0.021	0.031
South	-	0.023	0.015
Urban-inside central city	-	0.062	0.031
Urban-outside central city	-	0.034	0.033
Nonurban area	-	0.029	0.021
West	-	0.022	0.018
Urban-inside central city	-	0.054	0.005
Urban-outside central city	-	0.031	0.031
Nonurban area	-	0.027	0.024

^a Metro status data not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-38. Standard errors for percentage of school districts with high school graduation requirements in computer science, by selected district characteristics: 1990-91 to 1993-94

District Characteristic	School Year	
	1990-91 Percent of Districts	1993-94 Percent of Districts
TOTAL	1.04	0.71
District Size		
Under 1,000	1.87	1.52
1,000 to 9,999	1.08	1.05
10,000 or more	1.08	0.57
Minority Students ^a		
Under 10%	1.57	0.96
10% to under 50%	1.43	1.59
50% or more	2.81	2.29
Minority Teachers		
None	1.93	1.23
More than 0% to under 20%	1.11	0.94
20% or more	2.80	1.68
Metro Status		
Urban-inside central city	3.20	2.05
Urban-outside central city	1.43	1.51
Nonurban area	1.32	1.11
Region by Metro Status		
Northeast	1.93	1.92
Urban-inside central city	3.30	2.16
Urban-outside central city	2.46	2.57
Nonurban area	3.55	3.66
Midwest	2.04	1.29
Urban-inside central city	5.97	5.22
Urban-outside central city	2.61	3.04
Nonurban area	2.49	1.70
South	1.59	1.22
Urban-inside central city	5.97	2.45
Urban-outside central city	2.84	2.58
Nonurban area	1.99	1.70
West	2.37	1.95
Urban-inside central city	3.61	1.84
Urban-outside central city	3.46	3.63
Nonurban area	2.89	2.33

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-39. Standard errors for percentage of school districts with graduation requirements in foreign language in school districts with 4-year programs, by selected district characteristics: 1987-88 to 1993-94.

District Characteristic	School Year		
	1987-88 Percent of Districts	1990-91 Percent of Districts	1993-94 Percent of Districts
TOTAL	0.56	0.67	0.75
District Size			
Under 1,000	1.22	1.41	1.46
1,000 to 9,999	0.63	0.96	0.79
10,000 or more	0.62	2.27	0.66
Minority Students ^a			
Under 10%	0.76	0.82	0.69
10% to under 50%	1.21	1.40	1.74
50% or more	1.76	2.88	2.00
Minority Teachers			
None	0.99	1.09	0.94
More than 0% to under 20%	0.92	1.17	1.25
20% or more	1.53	2.94	1.65
Metro Status			
Urban-inside central city	-	2.65	1.28
Urban-outside central city	-	1.41	0.85
Nonurban area	-	0.87	0.99
Region by Metro Status			
Northeast	-	2.10	1.73
Urban-inside central city	-	2.56	2.10
Urban-outside central city	-	2.65	1.81
Nonurban area	-	2.81	3.25
Midwest	-	1.12	0.71
Urban-inside central city	-	5.70	2.88
Urban-outside central city	-	1.73	1.27
Nonurban area	-	1.40	0.85
South	-	1.42	1.35
Urban-inside central city	-	5.62	2.18
Urban-outside central city	-	2.21	2.33
Nonurban area	-	1.96	1.89
West	-	2.47	2.45
Urban-inside central city	-	5.96	3.19
Urban-outside central city	-	4.49	4.06
Nonurban area	-	2.91	2.79

^a Metro status data not available from the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire).

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-40. Standard errors for number and percentage of school districts with community service requirements for high school graduation in school districts with 4-year programs, by selected district characteristics: 1993-94

District Characteristic	Number of Districts	Percent of Districts
TOTAL	37	0.32
District Size		
Under 1,000	20	0.44
1,000 to 9,999	25	0.42
10,000 or more	2	0.27
Minority Students^a		
Under 10%	27	0.42
10% to under 50%	18	0.51
50% or more	8	0.64
Minority Teachers		
None	24	0.48
More than 0% to under 20%	22	0.41
20% or more	3	0.39
Metro Status		
Urban-inside central city	6	1.24
Urban-outside central city	22	0.51
Nonurban area	22	0.34
Region by Metro Status		
Northeast		
Urban-inside central city	1	1.73
Urban-outside central city	18	1.17
Nonurban area	8	1.20
Midwest		
Urban-inside central city	5	3.58
Urban-outside central city	12	0.77
Nonurban area	13	0.50
South		
Urban-inside central city	1	0.89
Urban-outside central city	9	1.02
Nonurban area	9	0.40
West		
Urban-inside central city	0	0.00
Urban-outside central city	4	0.92
Nonurban area	10	0.97

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-41. Standard errors for percentage of school districts and number of students in grades K-12 participating in Chapter 1 programs, by selected district characteristics: 1993-94

District Characteristic	Percent of Districts	Number of Students
TOTAL	0.8	93,666
District Size		
Under 1,000	1.4	23,645
1,000 to 9,999	0.2	78,452
10,000 or more	0.2	33,674
Minority Students^a		
Under 10%	1.2	22,761
10% to under 50%	0.8	33,426
50% or more	0.8	87,977
Minority Teachers		
None	1.4	19,058
More than 0% to under 20%	0.5	78,471
20% or more	1.4	56,451
Metro Status		
Urban-inside central city	1.7	30,310
Urban-outside central city	0.6	82,497
Nonurban area	1.3	33,125
Region by Percent Minority Students^a		
Northeast	0.7	29,994
Under 10%	0.8	14,467
10% to under 50%	1.5	13,029
50% or more	0.3	19,447
Midwest	1.8	19,682
Under 10%	2.2	13,862
10% to under 50%	1.3	9,941
50% or more	4.0	7,636
South	0.8	35,480
Under 10%	0.6	9,185
10% to under 50%	1.0	13,414
50% or more	1.6	36,637
West	2.0	86,748
Under 10%	4.2	6,304
10% to under 50%	2.9	28,693
50% or more	0.7	79,899

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-42. Standard errors for percentage of school districts with various types of programs for prekindergarten-age children, by selected district characteristics: 1993-94

District Characteristic	Head Start	Type of Prekindergarten Programs					No PK Programs
		Day Care	Chapter 1	Special Education	General		
TOTAL	0.72	0.72	0.36	0.90	0.87	1.00	
District Size							
Under 1,000	1.06	1.14	0.57	1.49	1.53	1.85	
1,000 to 9,999	1.02	0.79	0.62	1.14	0.79	0.89	
10,000 or more	0.79	0.90	0.54	0.73	0.74	0.60	
Minority Students^a							
Under 10%	0.87	0.80	0.47	0.99	1.32	1.28	
10% to under 50%	1.20	1.97	0.78	1.72	1.63	1.94	
50% or more	3.74	1.68	1.22	3.55	2.67	4.54	
Minority Teachers							
None	1.08	0.69	0.54	1.17	1.42	1.38	
More than 0% to under 20%	1.12	1.40	0.59	1.61	1.18	1.83	
20% or more	1.97	1.53	1.12	1.83	1.84	1.65	
Metro Status							
Urban-inside central city	2.22	2.69	1.33	2.73	1.81	2.04	
Urban-outside central city	1.09	1.39	0.45	1.68	1.19	1.97	
Nonurban area	1.02	0.71	0.52	1.13	1.26	1.35	
Region by Percent Minority Students^a							
Northeast	1.28	1.25	0.86	1.60	1.53	1.93	
Under 10%	1.54	1.49	1.09	1.95	1.68	2.45	
10% to under 50%	2.01	2.43	0.85	3.15	3.31	4.04	
50% or more	7.03	2.77	2.35	6.63	5.00	5.41	
Midwest	1.21	1.09	0.67	1.55	1.86	1.56	
Under 10%	1.33	1.20	0.69	1.77	2.09	1.85	
10% to under 50%	2.72	2.25	2.52	3.39	3.29	3.47	
50% or more	5.16	3.37	1.77	5.14	6.24	3.87	
South	1.11	0.80	0.91	1.55	1.40	1.38	
Under 10%	1.91	1.33	0.86	2.18	2.34	2.71	
10% to under 50%	1.51	1.01	1.24	2.06	2.50	1.87	
50% or more	3.10	2.16	2.01	3.63	3.10	2.51	
West	1.83	2.99	0.29	2.57	1.06	3.27	
Under 10%	1.33	1.53	0.36	3.00	1.80	3.50	
10% to under 50%	2.63	6.46	0.72	4.65	1.97	5.97	
50% or more	8.20	4.35	1.35	8.62	3.93	11.09	

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-43. Standard errors for percentage of school districts with students eligible for participation and numbers of students in grades K-12 approved for participation in and receiving free or reduced-price lunches through the National School Lunch Program, by selected district characteristics: 1993-94

District Characteristic	Percent of Districts	Students Approved for Participation	Students Receiving Free or Reduced-price Lunch
TOTAL	0.80	174,707	139,061
District Size			
Under 1,000	1.50	45,360	32,990
1,000 to 9,999	0.33	140,671	115,307
10,000 or more	0.26	67,988	56,544
Minority Students^a			
Under 10%	1.22	77,415	48,989
10% to under 50%	0.96	93,261	70,537
50% or more	0.79	122,653	106,966
Minority Teachers			
None	1.40	63,328	31,283
More than 0% to under 20%	0.59	149,539	112,842
20% or more	1.30	88,070	81,693
Metro Status			
Urban-inside central city	0.85	67,365	59,106
Urban-outside central city	0.66	131,927	102,871
Nonurban area	1.26	86,648	64,271
Region by Percent Minority Students^a			
Northeast	1.25	77,903	49,870
Under 10%	1.54	48,765	24,434
10% to under 50%	3.45	33,413	24,199
50% or more	1.81	46,481	36,582
Midwest	1.61	69,153	50,070
Under 10%	1.92	59,801	32,653
10% to under 50%	0.48	38,225	30,508
50% or more	2.75	18,742	18,511
South	0.56	66,584	53,318
Under 10%	0.18	26,892	18,110
10% to under 50%	0.83	42,643	32,248
50% or more	1.61	53,865	47,499
West	1.54	127,435	105,252
Under 10%	3.73	32,202	16,792
10% to under 50%	1.77	61,685	49,721
50% or more	0.98	101,482	88,460

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-44. Standard errors for number and percentage of school districts with a student test performance reporting policy, by selected district characteristics: 1993-94

District Characteristic	Number of Districts	Percent of Districts
TOTAL	124	0.69
District Size		
Under 1,000	148	1.18
1,000 to 9,999	109	0.58
10,000 or more	8	0.43
Minority Students^a		
Under 10%	146	1.09
10% to under 50%	124	0.97
50% or more	115	1.64
Minority Teachers		
None	193	1.32
More than 0% to under 20%	162	0.63
20% or more	42	1.62
Region		
Northeast	48	1.39
Midwest	85	1.30
South	29	0.78
West	50	1.73
Metro Status by District Size		
Urban-inside central city	21	2.17
Under 1,000	--	--
1,000 to 9,999	20	3.14
10,000 or more	5	0.94
Urban-outside central city	92	0.74
Under 1,000	114	1.44
1,000 to 9,999	80	0.98
10,000 or more	7	0.42
Nonurban area	129	0.99
Under 1,000	117	1.42
1,000 to 9,999	66	0.78
10,000 or more	3	0.23

-- Too few cases for a reliable estimate.

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-45. Standard errors for percentage of school districts with choice by type of choice program, by selected district characteristics: 1993-94

District Characteristic	Any Choice Program	Magnet School	Dist. Open Enrollment	Interdistrict Choice	
				Transfers Outside of District	Transfers into District
TOTAL	1.049	0.505	0.792	1.075	0.916
District Size					
Under 1,000	2.029	0.885	1.445	1.976	1.625
1,000 to 9,999	0.941	0.533	0.742	0.940	0.932
10,000 or more	0.591	0.617	0.541	0.633	0.596
Minority Students^a					
Under 10%	1.180	0.700	0.887	1.289	1.201
10% to under 50%	1.967	0.690	1.960	2.046	1.880
50% or more	2.343	1.552	1.762	2.053	2.095
Minority Teachers					
None	1.444	0.920	1.003	1.534	1.396
More than 0% to under 20%	1.576	0.420	1.396	1.663	1.442
20% or more	1.869	0.957	1.317	1.684	1.714
Region					
Northeast	1.072	0.690	0.780	1.014	0.956
Midwest	1.536	0.990	1.135	1.771	1.471
South	1.332	0.633	0.704	1.223	1.270
West	3.704	1.335	3.159	3.681	3.107
Metro Status by District Size					
Urban-inside central city	2.293	1.431	2.108	1.916	1.878
Under 1,000	--	--	--	--	--
1,000 to 9,999	4.228	2.127	3.993	3.696	3.630
10,000 or more	1.032	0.963	0.907	0.944	1.014
Urban-outside central city	1.749	0.670	1.494	1.818	1.430
Under 1,000	4.797	--	--	4.869	3.212
1,000 to 9,999	1.486	0.882	1.198	1.312	1.368
10,000 or more	0.980	0.855	0.881	1.018	0.935
Nonurban area	1.124	0.709	0.777	1.121	1.014
Under 1,000	1.703	1.127	1.192	1.693	1.528
1,000 to 9,999	1.222	0.528	1.028	1.186	1.247
10,000 or more	2.482	2.642	2.501	2.435	2.424

-- Too few cases for a reliable estimate.

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-46. Standard errors for percentage of school districts with written policies about student discipline, alcohol use, drug use, and tobacco use, by selected district characteristics: 1993-94

District Characteristic	Student Discipline	Alcohol Use	Drug Use	Tobacco Use
TOTAL	0.11	0.21	0.22	0.30
District Size				
Under 1,000	0.21	0.39	0.41	0.55
1,000 to 9,999	0.03	0.10	0.10	0.30
10,000 or more	0.09	0.23	0.23	0.24
Minority Students^a				
Under 10%	0.16	0.33	0.33	0.42
10% to under 50%	0.16	0.10	0.14	0.29
50% or more	0.11	0.39	0.39	0.37
Minority Teachers				
None	0.21	0.44	0.44	0.58
More than 0% to under 20%	0.12	0.11	0.12	0.24
20% or more	0.83	0.84	0.81	0.87
Region				
Northeast	0.30	0.66	0.65	0.83
Midwest	0.17	0.46	0.46	0.67
South	0.02	0.06	0.15	0.14
West	0.28	0.21	0.20	0.29
Metro Status by District Size				
Urban-inside central city	0.13	0.28	0.28	0.39
Under 1,000	1.92	0.61	0.61	0.61
1,000 to 9,999	0.00	0.00	0.00	0.58
10,000 or more	0.01	0.63	0.63	0.63
Urban-outside central city	0.15	0.32	0.31	0.42
Under 1,000	0.44	0.87	0.87	0.87
1,000 to 9,999	0.05	0.18	0.19	0.47
10,000 or more	0.17	0.21	0.21	0.32
Nonurban area	0.20	0.31	0.34	0.47
Under 1,000	0.30	0.49	0.53	0.72
1,000 to 9,999	0.03	0.00	0.00	0.38
10,000 or more	0.00	0.00	0.00	0.16

a) Districts without students were excluded for this characteristic only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Section 2 *State Tables*

Table B-47. Standard errors for number of full and part time teachers and percentage by race and ethnicity, by state: 1993-94

State	Total Teachers	Percent by Race and Ethnicity				
		American	Indian	Asian	Hispanic	Black
50 States and D.C.	20,454	0.006		0.017	0.087	0.100
Alabama	971	0.007		0.004	0.008	0.591
Alaska	77	0.211		0.034	0.014	0.018
Arizona	2,742	0.088		0.026	0.311	0.078
Arkansas	870	0.069		0.009	0.010	0.856
California	11,526	0.023		0.170	0.373	0.223
Colorado	2,073	0.016		0.052	0.293	0.071
Connecticut	2,781	0.035		0.013	0.174	0.135
Delaware	71	0.002		0.005	0.008	0.065
District of Columbia	0	0.000		0.000	0.000	0.000
Florida	1,378	0.002		0.006	0.061	0.137
Georgia	1,898	0.007		0.014	0.015	0.595
Hawaii	0	0.000		0.000	0.000	0.000
Idaho	105	0.022		0.025	0.080	0.001
Illinois	3,944	0.031		0.037	0.095	0.455
Indiana	1,358	0.006		0.013	0.076	0.140
Iowa	1,172	0.011		0.021	0.033	0.031
Kansas	961	0.107		0.028	0.050	0.095
Kentucky	736	0.004		0.014	0.011	0.109
Louisiana	608	0.002		0.026	0.005	0.476
Maine	1,478	0.014		0.011	0.020	0.014
Maryland	1,109	0.000		0.014	0.003	0.177
Massachusetts	4,783	0.009		0.042	0.127	0.115
Michigan	8,690	0.022		0.021	0.073	0.772
Minnesota	1,951	0.041		0.033	0.022	0.016
Mississippi	586	0.017		0.010	0.014	0.674
Missouri	3,003	0.022		0.017	0.028	0.322
Montana	459	0.305		0.035	0.058	0.033
Nebraska	1,021	0.014		0.020	0.048	0.023
Nevada	56	0.003		0.004	0.010	0.023
New Hampshire	1,128	0.006		0.015	0.032	0.016
New Jersey	3,886	0.015		0.056	0.182	0.450
New Mexico	348	0.035		0.019	0.615	0.026
New York	5,453	0.011		0.024	0.146	0.242
North Carolina	2,449	0.021		0.010	0.015	0.594
North Dakota	241	0.102		0.012	0.023	0.001
Ohio	3,850	0.005		0.017	0.029	0.801
Oklahoma	936	0.284		0.020	0.047	0.321
Oregon	1,749	0.043		0.083	0.363	0.060
Pennsylvania	4,301	0.010		0.016	0.036	0.382
Rhode Island	208	0.001		0.003	0.032	0.036
South Carolina	852	0.007		0.005	0.003	0.458
South Dakota	114	0.082		0.000	0.019	0.017
Tennessee	1,855	0.003		0.004	0.008	0.486
Texas	4,354	0.016		0.009	0.811	0.248
Utah	106	0.009		0.003	0.004	0.001
Vermont	300	0.003		0.021	0.065	0.007
Virginia	3,270	0.010		0.018	0.019	0.609
Washington	5,710	0.036		0.162	0.085	0.169
West Virginia	66	0.000		0.001	0.001	0.007
Wisconsin	1,433	0.029		0.023	0.032	0.071
Wyoming	80	0.084		0.006	0.021	0.008

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-48. Standard errors for number of students and percentage by race and ethnicity, by state: 1993-94

State	Total	Percent by Race and Ethnicity				
	Students	American Indian	Asian	Hispanic	Black	White
50 States and D.C.	353,831	0.023	0.064	0.233	0.173	0.259
Alabama	14,768	0.106	0.018	0.010	0.866	0.843
Alaska	1,243	0.491	0.043	0.019	0.039	0.470
Arizona	48,187	0.348	0.044	1.016	0.137	1.074
Arkansas	13,949	0.022	0.018	0.066	1.326	1.287
California	260,554	0.040	0.466	1.103	0.308	1.138
Colorado	36,082	0.021	0.067	0.742	0.186	0.692
Connecticut	37,066	0.015	0.051	0.696	0.574	1.265
Delaware	1,012	0.002	0.017	0.019	0.096	0.120
District of Columbia	0	0.000	0.000	0.000	0.000	0.000
Florida	20,904	0.002	0.010	0.158	0.188	0.299
Georgia	28,407	0.004	0.026	0.075	0.970	1.012
Hawaii	0	0.000	0.000	0.000	0.000	0.000
Idaho	2,037	0.051	0.035	0.372	0.004	0.362
Illinois	62,186	0.063	0.456	0.485	1.555	1.874
Indiana	20,660	0.027	0.159	0.248	0.469	0.645
Iowa	17,406	0.012	0.111	0.193	0.102	0.297
Kansas	14,799	0.069	0.052	0.242	0.301	0.495
Kentucky	12,145	0.003	0.015	0.009	0.333	0.344
Louisiana	10,203	0.005	0.017	0.012	0.417	0.405
Maine	20,103	0.034	0.018	0.025	0.041	0.086
Maryland	17,604	0.001	0.015	0.011	0.209	0.190
Massachusetts	68,835	0.016	0.133	0.407	0.306	0.713
Michigan	158,461	0.239	0.110	0.216	1.591	1.648
Minnesota	31,987	0.534	0.056	0.176	0.267	0.604
Mississippi	10,599	0.053	0.024	0.010	1.001	0.981
Missouri	48,610	0.016	0.081	0.043	1.000	1.021
Montana	6,714	0.708	0.032	0.060	0.018	0.695
Nebraska	12,276	0.232	0.049	0.417	0.064	0.506
Nevada	1,100	0.025	0.003	0.038	0.036	0.046
New Hampshire	16,191	0.009	0.049	0.048	0.047	0.129
New Jersey	47,885	0.031	0.399	0.996	1.015	1.550
New Mexico	5,927	0.186	0.012	0.587	0.107	0.577
New York	78,241	0.080	0.179	0.458	0.566	1.075
North Carolina	36,776	0.068	0.035	0.056	0.974	0.964
North Dakota	2,935	0.479	0.018	0.053	0.017	0.471
Ohio	66,025	0.185	0.073	0.114	0.831	0.868
Oklahoma	15,054	0.448	0.041	0.182	0.739	0.711
Oregon	32,517	0.117	0.122	0.302	0.160	0.327
Pennsylvania	72,724	0.009	0.080	0.215	0.838	0.926
Rhode Island	2,916	0.006	0.060	0.175	0.130	0.367
South Carolina	14,117	0.018	0.011	0.012	0.568	0.565
South Dakota	1,667	0.559	0.012	0.025	0.011	0.554
Tennessee	30,485	0.003	0.015	0.017	0.931	0.947
Texas	70,229	0.022	0.063	1.161	0.393	1.051
Utah	2,461	0.018	0.007	0.009	0.003	0.020
Vermont	3,530	0.044	0.030	0.018	0.032	0.064
Virginia	46,831	0.005	0.128	0.079	0.906	0.941
Washington	105,124	0.221	0.462	0.610	0.420	0.941
West Virginia	863	0.000	0.001	0.000	0.010	0.011
Wisconsin	22,347	0.119	0.105	0.126	0.276	0.356
Wyoming	917	0.263	0.007	0.040	0.008	0.238

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-49. Standard errors for total number of full time equivalent (FTE) teachers and percentage that consists of new hires, by state: 1993-94

State	Total FTE Teachers	Percent New Hires
50 States and D.C.	19,389	0.04
Alabama	952	0.10
Alaska	74	0.13
Arizona	2,643	0.30
Arkansas	812	0.20
California	10,926	0.19
Colorado	2,022	0.24
Connecticut	2,672	0.15
Delaware	70	0.03
District of Columbia	0	0.00
Florida	1,185	0.03
Georgia	1,820	0.13
Hawaii	0	0.00
Idaho	102	0.13
Illinois	3,786	0.35
Indiana	1,299	0.16
Iowa	1,120	0.21
Kansas	878	0.27
Kentucky	721	0.13
Louisiana	600	0.07
Maine	1,451	0.28
Maryland	1,036	0.03
Massachusetts	4,515	0.18
Michigan	8,299	0.21
Minnesota	1,840	0.37
Mississippi	572	0.20
Missouri	2,875	0.32
Montana	427	0.48
Nebraska	978	0.50
Nevada	56	0.01
New Hampshire	1,094	0.31
New Jersey	3,790	0.23
New Mexico	346	0.09
New York	5,134	0.14
North Carolina	2,228	0.15
North Dakota	230	0.34
Ohio	3,777	0.21
Oklahoma	948	0.26
Oregon	1,679	0.19
Pennsylvania	4,219	0.31
Rhode Island	215	0.04
South Carolina	834	0.13
South Dakota	115	0.16
Tennessee	1,789	0.11
Texas	4,223	0.19
Utah	107	0.03
Vermont	276	0.42
Virginia	3,163	0.13
Washington	5,277	0.17
West Virginia	64	0.00
Wisconsin	1,392	0.15
Wyoming	78	0.09

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-50. Standard errors for number of newly hired FTE teachers, and percentage of newly hired FTE teachers with regular state certification, newly hired FTE teachers with emergency certification, and newly hired FTE teachers lacking regular state or emergency certification in their field of assignment, by state: 1993-94

State	Number of Newly Hired Teachers	Percent Newly Hired in Field of Assignment	Percent Newly Hired with Regular State Certification	Percent Newly Hired with Emergency Certification	Percent Newly Hired lacking Regular State or Emergency Certification in Field of Assignment
50 States and D.C.	1,815	0.21		0.14	0.14
Alabama	104	0.62		0.11	0.61
Alaska	14	0.10		0.10	0.00
Arizona	387	1.34		0.22	1.40
Arkansas	86	0.91		0.33	0.76
California	1,155	1.11		0.83	0.65
Colorado	213	2.09		0.86	1.73
Connecticut	145	1.02		0.07	1.03
Delaware	6	0.11		0.11	0.08
District of Columbia	0	0.00		0.00	0.00
Florida	114	0.37		0.37	0.27
Georgia	214	0.58		0.29	0.62
Hawaii	0	0.00		0.00	0.00
Idaho	17	0.35		0.35	0.03
Illinois	472	1.26		0.16	1.20
Indiana	103	0.79		0.45	0.57
Iowa	102	0.68		0.71	0.53
Kansas	121	0.48		0.09	0.48
Kentucky	62	0.19		0.16	0.09
Louisiana	63	0.71		0.57	0.56
Maine	85	0.97		0.92	0.17
Maryland	89	0.15		0.06	0.12
Massachusetts	331	0.95		0.60	0.64
Michigan	250	0.50		0.48	0.05
Minnesota	227	0.34		0.30	0.14
Mississippi	81	1.02		0.62	0.74
Missouri	335	1.23		0.81	0.97
Montana	67	0.78		0.63	0.32
Nebraska	100	2.38		2.00	1.15
Nevada	6	0.04		0.04	0.00
New Hampshire	106	0.85		0.61	0.52
New Jersey	276	1.05		0.65	1.02
New Mexico	45	0.45		0.20	0.34
New York	326	0.38		0.13	0.36
North Carolina	254	0.69		0.51	0.38
North Dakota	24	0.38		0.21	0.32
Ohio	331	0.64		0.38	0.35
Oklahoma	113	0.57		0.58	0.14
Oregon	105	1.23		0.81	0.78
Pennsylvania	437	1.27		0.26	1.19
Rhode Island	5	0.03		0.03	0.00
South Carolina	75	0.23		0.06	0.26
South Dakota	18	0.83		0.57	0.66
Tennessee	170	0.46		0.45	0.26
Texas	723	0.98		0.77	0.57
Utah	10	0.48		0.19	0.35
Vermont	35	0.81		0.67	0.58
Virginia	275	0.43		0.39	0.18
Washington	489	0.40		0.07	0.38
West Virginia	1	0.03		0.03	0.00
Wisconsin	120	0.65		0.61	0.23
Wyoming	8	0.38		0.31	0.29

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-51. Standard errors for percentage of school districts with different criteria for considering applicants for teaching positions, by state: 1993-94

State	Certification Type (in Field)			Graduate of Teacher Ed. Program	Special Knowledge Test	
	Full Standard	Emergency/Temporary	College Major/Minor in Teaching Field		District or State	National Teacher Exam
50 States and D.C.	0.88	0.89	0.86	1.13	0.90	0.86
Alabama	2.37	3.65	2.40	1.51	2.01	1.65
Alaska	3.55	4.87	3.40	3.89	0.00	0.00
Arizona	2.93	9.07	10.67	7.89	4.18	2.88
Arkansas	3.90	4.25	3.66	4.70	4.42	2.85
California	4.58	5.67	9.67	8.81	7.92	6.35
Colorado	5.11	7.84	7.09	5.38	4.40	0.71
Connecticut	1.37	7.72	5.62	6.86	4.90	2.37
Delaware	1.01	1.11	1.01	0.89	0.63	0.00
District of Columbia ^a	0.00	0.00	0.00	0.00	0.00	0.00
Florida	3.62	2.98	3.48	3.94	3.06	0.01
Georgia	4.55	3.72	3.78	4.81	2.84	0.30
Hawaii ^a	0.00	0.00	0.00	0.00	0.00	0.00
Idaho	1.94	4.42	3.05	4.01	3.52	3.16
Illinois	3.86	4.80	4.82	5.26	3.63	2.93
Indiana	3.19	4.04	3.72	3.61	3.98	3.85
Iowa	3.36	3.45	3.91	4.81	0.00	0.13
Kansas	2.57	4.21	3.26	4.06	3.31	4.13
Kentucky	1.90	3.57	1.30	2.00	4.48	3.72
Louisiana	3.11	2.94	2.66	2.93	1.32	2.54
Maine	2.75	6.00	5.78	5.16	7.07	5.84
Maryland	3.54	4.42	4.42	3.44	0.00	2.18
Massachusetts	4.50	4.16	5.35	5.02	1.70	0.61
Michigan	2.07	5.69	3.19	3.18	7.44	10.56
Minnesota	2.97	3.79	3.65	3.73	4.98	1.72
Mississippi	1.67	2.28	2.19	2.90	3.63	0.00
Missouri	5.82	4.89	3.02	6.12	4.62	3.39
Montana	4.93	5.45	4.79	4.93	4.74	5.47
Nebraska	2.30	8.28	5.29	6.79	8.13	6.03
Nevada	1.13	0.52	0.52	0.44	0.61	0.35
New Hampshire	4.46	5.04	6.25	5.45	2.23	0.00
New Jersey	4.05	6.28	6.04	6.48	5.91	6.87
New Mexico	4.87	4.96	3.47	4.88	5.80	6.90
New York	1.65	3.73	3.48	3.73	4.17	2.80
North Carolina	3.70	3.31	3.34	3.40	3.44	1.58
North Dakota	1.20	3.96	4.33	1.31	0.83	0.71
Ohio	1.79	4.60	3.06	3.62	4.89	5.39
Oklahoma	2.76	2.58	2.66	3.03	1.88	2.05
Oregon	6.21	6.09	5.61	6.13	6.40	2.78
Pennsylvania	1.47	5.14	4.34	3.53	3.28	4.16
Rhode Island	0.00	2.50	0.51	0.39	2.24	0.49
South Carolina	2.23	2.86	2.69	4.62	3.56	2.01
South Dakota	2.03	3.65	3.03	2.82	0.00	0.39
Tennessee	1.38	5.43	4.30	4.53	4.94	6.42
Texas	3.79	2.50	2.86	3.82	2.43	2.12
Utah	3.20	2.06	4.03	3.29	0.00	0.00
Vermont	1.16	4.26	5.25	4.52	1.85	0.70
Virginia	5.56	4.33	5.43	7.18	4.80	7.46
Washington	11.67	10.09	10.64	9.82	10.23	0.00
West Virginia	0.10	0.14	0.07	0.17	0.11	0.07
Wisconsin	3.65	3.81	4.62	2.03	2.92	0.00
Wyoming	1.06	2.57	2.93	2.44	0.99	0.00

a) The District of Columbia and Hawaii each have only one school district.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-52. Standard errors for percentage of school districts using pay incentives to recruit or retain teachers to teach in less desirable locations or in fields of shortage, by state: 1987-88 to 1993-94

State	School Year		
	1987-88 Percent	1990-91 Percent	1993-94 Percent
50 States and D.C.	0.46	0.69	0.68
Alabama	2.01	2.52	1.48
Alaska	0.00	4.33	4.48
Arizona	4.15	7.86	10.84
Arkansas	0.23	4.12	3.17
California	2.25	3.87	4.79
Colorado	3.24	7.93	5.77
Connecticut	3.45	1.44	1.03
Delaware	0.00	0.00	0.13
District of Columbia ^a	0.00	0.00	0.00
Florida	0.27	1.62	1.75
Georgia	3.73	4.52	3.94
Hawaii ^a	0.00	0.00	0.00
Idaho	10.84	2.04	1.98
Illinois	0.40	3.38	3.92
Indiana	2.57	1.97	0.88
Iowa	2.93	1.82	3.31
Kansas	3.77	1.98	2.05
Kentucky	3.06	1.92	2.44
Louisiana	0.22	1.94	1.41
Maine	1.05	2.70	0.22
Maryland	0.00	0.11	1.22
Massachusetts	1.29	1.10	1.83
Michigan	1.49	3.37	2.45
Minnesota	3.84	1.37	3.48
Mississippi	1.06	2.31	1.78
Missouri	2.84	3.10	4.05
Montana	2.69	4.44	2.17
Nebraska	4.34	4.61	5.05
Nevada	0.00	0.00	0.61
New Hampshire	3.94	2.74	2.34
New Jersey	3.10	4.53	4.08
New Mexico	10.07	2.48	1.41
New York	1.86	3.30	2.37
North Carolina	3.16	2.72	4.01
North Dakota	5.26	3.81	3.14
Ohio	0.96	1.36	1.65
Oklahoma	1.94	4.06	2.88
Oregon	0.47	8.03	5.54
Pennsylvania	1.97	2.46	2.34
Rhode Island	4.27	2.43	0.18
South Carolina	0.96	4.11	1.40
South Dakota	5.12	4.71	2.77
Tennessee	1.42	2.93	1.08
Texas	2.93	4.01	3.71
Utah	4.72	3.26	0.32
Vermont	1.82	1.75	1.38
Virginia	2.78	4.40	2.61
Washington	1.14	1.07	1.33
West Virginia	0.00	0.00	0.15
Wisconsin	2.80	2.94	3.21
Wyoming	3.89	3.93	1.78

a) The District of Columbia and Hawaii each have only one school district.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-53. Standard errors for percentage of school districts in which free training is offered to prepare staff members to teach in fields with current or anticipated shortages, by state: 1987-88 to 1993-94

State	School Year		
	1987-88 Percent	1990-91 Percent	1993-94 Percent
50 States and D.C.	0.59	0.52	0.84
Alabama	2.89	3.76	1.92
Alaska	0.52	6.23	4.25
Arizona	5.88	5.57	4.83
Arkansas	3.38	2.77	4.00
California	3.83	5.36	8.43
Colorado	3.55	2.47	2.22
Connecticut	3.73	1.95	2.08
Delaware	0.00	0.00	0.94
District of Columbia ^a	0.00	0.00	0.00
Florida	5.18	6.17	2.36
Georgia	5.27	5.40	4.53
Hawaii ^a	0.00	0.00	0.00
Idaho	10.78	3.72	3.18
Illinois	1.42	2.12	3.55
Indiana	2.11	0.81	2.37
Iowa	2.99	2.88	3.61
Kansas	4.36	3.40	3.68
Kentucky	3.01	3.23	2.86
Louisiana	2.83	5.42	1.89
Maine	6.55	1.56	5.59
Maryland	4.55	3.96	0.50
Massachusetts	1.61	1.81	1.22
Michigan	2.60	1.62	9.52
Minnesota	4.07	2.05	0.26
Mississippi	5.08	2.66	2.77
Missouri	2.15	0.63	6.36
Montana	5.36	3.31	2.13
Nebraska	2.42	4.02	4.45
Nevada	0.00	0.00	1.13
New Hampshire	7.66	5.47	2.67
New Jersey	2.98	3.65	5.04
New Mexico	10.37	4.59	4.16
New York	1.57	1.96	2.53
North Carolina	3.93	4.51	3.87
North Dakota	6.47	2.10	4.44
Ohio	1.63	1.18	2.56
Oklahoma	3.82	3.39	2.27
Oregon	4.85	2.12	5.72
Pennsylvania	2.65	2.28	3.69
Rhode Island	0.00	0.03	2.57
South Carolina	6.06	4.24	3.05
South Dakota	5.03	4.75	2.72
Tennessee	3.89	3.79	4.86
Texas	2.05	2.52	3.23
Utah	6.66	7.68	4.19
Vermont	2.93	1.47	3.28
Virginia	5.07	6.23	4.99
Washington	4.62	4.10	10.07
West Virginia	0.00	0.00	0.06
Wisconsin	2.71	2.26	2.92
Wyoming	0.22	2.35	1.13

a) The District of Columbia and Hawaii each have only one school district.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-54. Standard errors for average low and high salary for full time teachers in actual and in constant 1993-94 dollars, by state: 1990-91 to 1993-94^a

State	School Year					
	1990-91		1990-91		1993-94	
	Actual Dollars	Constant 1993-94 Dollars ^b	Actual Dollars	Constant 1993-94 Dollars ^b	Low	High
State	Low	High	Low	High	Low	High
50 States and D.C.	42	133	46	145	63	148
Alabama	282	566	308	618	50	150
Alaska	349	571	381	623	182	292
Arizona	702	1,617	766	1,765	1,337	529
Arkansas	148	314	161	343	140	272
California	303	892	331	974	492	694
Colorado	205	664	223	725	157	1,025
Connecticut	242	518	264	566	273	914
Delaware	0	0	0	0	11	76
District of Columbia	0	0	0	0	0	0
Florida	130	348	142	380	59	185
Georgia	95	350	104	382	51	165
Hawaii	0	0	0	0	0	0
Idaho	74	282	80	308	67	238
Illinois	212	699	231	763	289	837
Indiana	133	320	145	350	124	253
Iowa	125	368	137	402	94	268
Kansas	149	389	163	425	145	266
Kentucky	613	206	669	225	72	139
Louisiana	172	214	187	234	289	241
Maine	98	490	107	535	144	387
Maryland	151	491	165	536	45	215
Massachusetts	166	509	181	555	162	328
Michigan	217	622	237	679	320	1,657
Minnesota	149	324	163	354	116	383
Mississippi	47	88	51	96	27	55
Missouri	225	594	245	649	133	511
Montana	205	650	223	710	209	1,047
Nebraska	308	844	337	922	241	1,177
Nevada	0	0	0	0	16	83
New Hampshire	185	510	202	557	162	455
New Jersey	406	1,005	443	1,097	229	1,056
New Mexico	166	288	181	314	59	482
New York	174	617	190	674	228	784
North Carolina	29	129	31	140	13	212
North Dakota	113	700	124	764	202	527
Ohio	140	540	153	590	126	388
Oklahoma	271	316	296	345	45	138
Oregon	275	1,088	300	1,188	132	725
Pennsylvania	167	439	183	479	340	831
Rhode Island	172	222	188	242	48	101
South Carolina	75	263	82	287	107	234
South Dakota	353	1,378	386	1,505	75	226
Tennessee	93	300	102	328	130	572
Texas	78	157	85	171	107	169
Utah	64	351	69	383	37	225
Vermont	211	615	230	671	186	440
Virginia	142	578	155	631	173	498
Washington	28	209	31	228	10	26
West Virginia	0	0	0	0	1	2
Wisconsin	115	340	126	372	81	347
Wyoming	55	1,451	61	1,584	59	101

a) In districts with salary schedules, the low salary corresponds to bachelor's degree with no teaching experience and high is equivalent to maximum scheduled salary. Districts without salary schedule reported their lowest and highest base salaries for the year.

b) Adjusted using the Consumer Price Index.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-55. Standard errors for average scheduled salary for teachers (in constant 1993-94 dollars) by education and teaching experience for school districts with salary schedules, by state: 1990-91 and 1993-94

State	1990-91 (Constant 1993-94 Dollars) ^a			1993-94 (Actual Dollars)		
	Bachelor's without Experience	Master's without Experience	Master's with 20 yrs Experience	Bachelor's without Experience	Master's without Experience	Master's with 20 yrs Experience
50 States and D.C.	65	81	137	60	63	110
Alabama	308	297	528	50	62	90
Alaska	381	376	350	184	194	523
Arizona	225	211	405	295	282	517
Arkansas	163	168	272	140	137	148
California	334	530	677	492	486	771
Colorado	223	193	381	157	244	645
Connecticut	264	304	275	284	302	639
Delaware	0	0	0	11	15	82
District of Columbia	0	0	0	0	0	0
Florida	142	174	296	59	91	94
Georgia	101	101	166	51	55	109
Hawaii	0	0	0	0	0	0
Idaho	84	126	246	67	138	191
Illinois	239	299	792	294	323	752
Indiana	147	159	377	124	135	269
Iowa	140	169	339	95	100	276
Kansas	164	213	306	145	138	267
Kentucky	669	701	674	72	73	119
Louisiana	190	192	225	121	122	149
Maine	107	132	442	156	180	287
Maryland	165	291	366	45	72	76
Massachusetts	182	195	565	160	160	290
Michigan	237	269	561	235	306	717
Minnesota	163	179	263	116	156	345
Mississippi	52	48	74	27	29	43
Missouri	256	281	529	133	166	390
Montana	147	228	403	65	118	261
Nebraska	241	295	534	122	243	242
Nevada	0	0	0	16	19	61
New Hampshire	182	214	474	176	279	511
New Jersey	246	301	1,071	241	374	860
New Mexico	181	264	315	31	123	353
New York	198	289	535	257	346	682
North Carolina	31	35	93	13	30	65
North Dakota	155	280	545	89	88	229
Ohio	153	170	453	129	153	420
Oklahoma	300	295	367	45	45	96
Oregon	322	503	1,076	135	170	591
Pennsylvania	186	212	390	346	389	990
Rhode Island	188	172	222	32	59	83
South Carolina	82	94	146	108	120	182
South Dakota	451	607	1,521	48	69	209
Tennessee	102	124	242	130	162	326
Texas	92	101	137	107	114	194
Utah	69	101	273	37	56	202
Vermont	146	177	484	144	212	606
Virginia	155	175	492	174	205	410
Washington	31	149	586	10	88	96
West Virginia	0	0	0	1	1	4
Wisconsin	126	190	271	80	109	390
Wyoming	61	398	904	59	75	127

a) Adjusted using the Consumer Price Index.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-56. Standard errors for percentage of school districts with collective bargaining units, by state: 1993-94

State	Percent
50 States and D.C.	0.87
Alabama	1.44
Alaska	3.88
Arizona	0.57
Arkansas	0.18
California	8.21
Colorado	2.92
Connecticut	0.02
Delaware	0.13
District of Columbia	0.00
Florida	2.27
Georgia	0.30
Hawaii	0.00
Idaho	3.99
Illinois	2.56
Indiana	1.97
Iowa	3.44
Kansas	5.18
Kentucky	1.61
Louisiana	2.66
Maine	3.07
Maryland	0.00
Massachusetts	0.37
Michigan	10.54
Minnesota	3.56
Mississippi	0.00
Missouri	0.98
Montana	5.73
Nebraska	8.12
Nevada	0.17
New Hampshire	3.94
New Jersey	0.50
New Mexico	4.43
New York	0.79
North Carolina	0.00
North Dakota	3.47
Ohio	2.24
Oklahoma	2.76
Oregon	7.60
Pennsylvania	0.15
Rhode Island	0.00
South Carolina	0.00
South Dakota	3.27
Tennessee	5.50
Texas	0.00
Utah	0.27
Vermont	3.80
Virginia	0.00
Washington	13.75
West Virginia	0.00
Wisconsin	0.00
Wyoming	0.99

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-57. Standard errors for number and percentage of school districts offering retirement plans to teachers, by state: 1987-88 to 1993-94

State	School Year		
	1987-88 Percent	1990-91 Percent	1993-94 Percent
50 States and D.C.	0.27	0.48	0.27
Alabama	0.00	0.80	0.54
Alaska	0.00	0.00	0.00
Arizona	1.53	5.81	0.00
Arkansas	0.00	0.00	0.00
California	0.00	6.31	0.25
Colorado	0.00	0.00	0.03
Connecticut	0.00	1.39	0.64
Delaware	0.00	0.00	0.00
District of Columbia	0.00	0.00	0.00
Florida	0.00	0.00	0.00
Georgia	0.00	1.72	0.00
Hawaii	0.00	0.00	0.00
Idaho	0.00	0.00	0.00
Illinois	1.48	0.74	0.73
Indiana	2.42	0.00	1.05
Iowa	2.99	1.63	1.26
Kansas	2.71	1.31	3.23
Kentucky	0.00	0.00	0.00
Louisiana	0.00	0.00	0.00
Maine	0.00	0.68	3.07
Maryland	0.00	0.00	0.00
Massachusetts	0.00	0.00	0.39
Michigan	1.97	0.75	0.00
Minnesota	2.20	1.28	2.18
Mississippi	0.00	0.00	0.00
Missouri	0.00	0.00	0.00
Montana	2.20	1.67	2.74
Nebraska	4.32	0.15	4.40
Nevada	0.00	0.00	0.00
New Hampshire	0.00	0.00	0.00
New Jersey	0.02	0.68	1.74
New Mexico	0.00	0.00	0.00
New York	0.24	0.00	0.00
North Carolina	0.00	0.00	0.00
North Dakota	2.07	1.97	3.49
Ohio	0.37	0.00	0.00
Oklahoma	0.00	0.00	0.00
Oregon	0.00	0.00	0.00
Pennsylvania	0.00	0.00	0.00
Rhode Island	0.00	0.00	0.00
South Carolina	0.00	0.00	0.00
South Dakota	0.00	0.00	0.00
Tennessee	0.12	0.68	0.00
Texas	0.49	1.40	0.21
Utah	0.00	0.00	0.00
Vermont	2.13	0.72	1.44
Virginia	0.00	1.60	0.00
Washington	0.00	0.00	0.00
West Virginia	0.00	0.00	0.00
Wisconsin	1.79	0.00	0.50
Wyoming	0.00	2.56	0.31

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-58. Standard errors for average number of years of English required for high school graduation in school districts with 4-year programs, by state: 1987-88 to 1993-94

State	School Year		
	1987-88	1990-91	1993-94
Number of Years	Number of Years	Number of Years	
50 States and D.C.	0.009	0.011	0.008
Alabama	0.007	0.011	0.000
Alaska	0.000	0.000	0.000
Arizona	0.143	0.000	0.000
Arkansas	0.000	0.032	0.004
California	0.056	0.053	0.062
Colorado	0.042	0.043	0.055
Connecticut	0.054	0.016	0.006
Delaware	0.000	0.000	0.000
District of Columbia	0.000	0.000	0.000
Florida	0.000	0.000	0.000
Georgia	0.000	0.031	0.022
Hawaii	0.000	0.000	0.000
Idaho	0.045	0.074	0.004
Illinois	0.049	0.061	0.052
Indiana	0.026	0.067	0.010
Iowa	0.051	0.069	0.039
Kansas	0.015	0.020	0.001
Kentucky	0.021	0.000	0.000
Louisiana	0.075	0.117	0.000
Maine	0.076	0.000	0.000
Maryland	0.000	0.000	0.000
Massachusetts	0.057	0.033	0.051
Michigan	0.045	0.073	0.080
Minnesota	0.064	0.066	0.000
Mississippi	0.040	0.000	0.013
Missouri	0.051	0.055	0.036
Montana	0.048	0.000	0.000
Nebraska	0.216	0.051	0.023
Nevada	0.000	0.000	0.000
New Hampshire	0.063	0.089	0.016
New Jersey	0.012	0.026	0.014
New Mexico	0.000	0.000	0.000
New York	0.020	0.028	0.000
North Carolina	0.001	0.000	0.062
North Dakota	0.020	0.015	0.014
Ohio	0.034	0.051	0.041
Oklahoma	0.048	0.160	0.000
Oregon	0.046	0.054	0.018
Pennsylvania	0.018	0.061	0.020
Rhode Island	0.000	0.000	0.000
South Carolina	0.000	0.001	0.000
South Dakota	0.000	0.034	0.000
Tennessee	0.000	0.065	0.032
Texas	0.021	0.019	0.003
Utah	0.090	0.058	0.037
Vermont	0.000	0.015	0.000
Virginia	0.015	0.061	0.000
Washington	0.065	0.027	0.035
West Virginia	0.000	0.000	0.000
Wisconsin	0.040	0.036	0.016
Wyoming	0.031	0.120	0.019

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-59. Standard errors for average number of years of mathematics required for high school graduation in school districts with 4-year programs, by state: 1987-88 to 1993-94

State	School Year		
	1987-88	1990-91	1993-94
	Number of Years	Number of Years	Number of Years
50 States and D.C.	0.011	0.012	0.009
Alabama	0.055	0.048	0.038
Alaska	0.047	0.069	0.042
Arizona	0.084	0.070	0.052
Arkansas	0.051	0.076	0.043
California	0.055	0.099	0.067
Colorado	0.110	0.080	0.092
Connecticut	0.060	0.026	0.033
Delaware	0.000	0.000	0.010
District of Columbia	0.000	0.000	0.000
Florida	0.020	0.039	0.029
Georgia	0.080	0.049	0.050
Hawaii	0.000	0.000	0.000
Idaho	0.071	0.077	0.060
Illinois	0.032	0.047	0.053
Indiana	0.062	0.080	0.042
Iowa	0.056	0.066	0.054
Kansas	0.050	0.044	0.059
Kentucky	0.021	0.024	0.036
Louisiana	0.063	0.063	0.001
Maine	0.093	0.114	0.050
Maryland	0.141	0.000	0.000
Massachusetts	0.089	0.092	0.049
Michigan	0.058	0.063	0.045
Minnesota	0.173	0.078	0.097
Mississippi	0.052	0.064	0.036
Missouri	0.046	0.058	0.052
Montana	0.090	0.070	0.059
Nebraska	0.137	0.069	0.045
Nevada	0.000	0.000	0.005
New Hampshire	0.113	0.075	0.052
New Jersey	0.060	0.060	0.028
New Mexico	0.113	0.058	0.035
New York	0.030	0.034	0.026
North Carolina	0.050	0.061	0.040
North Dakota	0.049	0.064	0.035
Ohio	0.031	0.036	0.033
Oklahoma	0.066	0.100	0.054
Oregon	0.063	0.061	0.031
Pennsylvania	0.049	0.054	0.049
Rhode Island	0.043	0.023	0.027
South Carolina	0.020	0.061	0.010
South Dakota	0.058	0.105	0.043
Tennessee	0.039	0.019	0.044
Texas	0.026	0.029	0.017
Utah	0.084	0.069	0.025
Vermont	0.134	0.067	0.076
Virginia	0.070	0.075	0.085
Washington	0.110	0.061	0.058
West Virginia	0.000	0.000	0.002
Wisconsin	0.048	0.035	0.033
Wyoming	0.076	0.099	0.037

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-60. Standard errors for average number of years of social science required for high school graduation in school districts with 4-year programs, by state: 1987-88 to 1993-94

State	School Year		
	1987-88	1990-91	1993-94
Number of Years	Number of Years	Number of Years	
50 States and D.C.	0.013	0.014	0.010
Alabama	0.050	0.034	0.025
Alaska	0.050	0.163	0.029
Arizona	0.121	0.067	0.097
Arkansas	0.047	0.082	0.032
California	0.061	0.101	0.100
Colorado	0.077	0.048	0.071
Connecticut	0.066	0.028	0.036
Delaware	0.000	0.000	0.003
District of Columbia	0.000	0.000	0.000
Florida	0.027	0.041	0.038
Georgia	0.052	0.077	0.062
Hawaii	0.000	0.000	0.000
Idaho	0.063	0.105	0.060
Illinois	0.041	0.059	0.081
Indiana	0.056	0.073	0.047
Iowa	0.069	0.072	0.039
Kansas	0.049	0.040	0.053
Kentucky	0.049	0.063	0.043
Louisiana	0.079	0.063	0.000
Maine	0.094	0.117	0.050
Maryland	0.055	0.000	0.005
Massachusetts	0.085	0.099	0.059
Michigan	0.055	0.095	0.055
Minnesota	0.092	0.117	0.084
Mississippi	0.057	0.055	0.036
Missouri	0.063	0.046	0.056
Montana	0.059	0.096	0.063
Nebraska	0.154	0.078	0.042
Nevada	0.000	0.000	0.008
New Hampshire	0.094	0.082	0.048
New Jersey	0.055	0.071	0.066
New Mexico	0.115	0.092	0.023
New York	0.032	0.012	0.014
North Carolina	0.054	0.066	0.038
North Dakota	0.065	0.036	0.031
Ohio	0.037	0.059	0.060
Oklahoma	0.071	0.112	0.057
Oregon	0.064	0.066	0.051
Pennsylvania	0.040	0.067	0.039
Rhode Island	0.040	0.047	0.026
South Carolina	0.050	0.066	0.040
South Dakota	0.054	0.064	0.035
Tennessee	0.079	0.046	0.046
Texas	0.036	0.039	0.034
Utah	0.002	0.058	0.048
Vermont	0.148	0.071	0.103
Virginia	0.076	0.095	0.039
Washington	0.084	0.101	0.069
West Virginia	0.000	0.000	0.001
Wisconsin	0.084	0.052	0.044
Wyoming	0.076	0.116	0.062

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-61. Standard errors for percentage of school districts with a student test performance reporting policy, by state: 1993-94

State	Percent of Districts
50 States and D.C.	0.69
Alabama	1.74
Alaska	0.04
Arizona	2.12
Arkansas	3.42
California	1.69
Colorado	1.29
Connecticut	2.56
Delaware	0.25
District of Columbia	0.00
Florida	0.00
Georgia	1.07
Hawaii	0.00
Idaho	2.61
Illinois	2.60
Indiana	2.33
Iowa	3.85
Kansas	4.70
Kentucky	0.63
Louisiana	2.63
Maine	3.16
Maryland	2.18
Massachusetts	3.44
Michigan	1.67
Minnesota	3.55
Mississippi	1.66
Missouri	6.46
Montana	4.99
Nebraska	9.37
Nevada	0.09
New Hampshire	5.03
New Jersey	0.69
New Mexico	1.18
New York	1.95
North Carolina	0.78
North Dakota	3.66
Ohio	2.73
Oklahoma	2.53
Oregon	5.43
Pennsylvania	4.02
Rhode Island	6.53
South Carolina	1.97
South Dakota	2.30
Tennessee	2.31
Texas	0.70
Utah	0.01
Vermont	4.54
Virginia	7.14
Washington	11.92
West Virginia	0.05
Wisconsin	1.98
Wyoming	1.95

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-62. Standard errors for percentage of school districts with choice by type of choice program, by state: 1993-94

District Characteristic	Any Choice Program	Magnet School	Dist. Open Enrollment	Interdistrict Choice	
				Transfers Outside of District	Transfers into District
50 States and D.C.	1.049	0.505	0.792	1.075	0.916
Alabama	2.744	0.957	0.980	2.819	1.945
Alaska	4.326	3.990	4.031	4.341	4.038
Arizona	4.971	11.045	10.153	5.642	5.522
Arkansas	4.076	1.526	1.689	4.081	3.208
California	8.337	1.478	7.683	8.565	6.931
Colorado	7.160	3.120	5.165	6.507	6.591
Connecticut	3.337	3.086	1.835	2.689	1.894
Delaware	0.252	0.126	0.126	0.126	0.252
District of Columbia ^a	0.000	0.000	0.000	0.000	0.000
Florida	2.739	1.747	2.759	2.671	2.671
Georgia	3.952	0.577	2.625	4.092	3.607
Hawaii ^a	0.000	0.000	0.000	0.000	0.000
Idaho	2.690	3.114	3.519	3.531	2.857
Illinois	2.173	0.878	1.212	1.522	0.842
Indiana	1.220	0.072	1.225	0.692	0.734
Iowa	3.284	1.632	2.529	3.365	3.461
Kansas	4.668	2.614	2.961	4.609	4.690
Kentucky	4.183	1.998	2.222	4.184	4.094
Louisiana	1.497	1.131	1.156	0.119	0.198
Maine	1.608	--	0.946	1.025	0.623
Maryland	1.271	0.331	--	1.100	1.100
Massachusetts	4.965	0.614	2.118	4.996	3.072
Michigan	8.458	1.456	3.822	9.503	2.648
Minnesota	2.409	3.788	3.767	2.409	3.396
Mississippi	1.513	0.709	0.837	1.376	1.457
Missouri	2.907	1.744	2.023	2.706	2.010
Montana	4.834	3.433	3.667	5.000	4.603
Nebraska	6.560	5.699	5.539	8.163	9.394
Nevada	0.261	0.174	--	--	0.087
New Hampshire	1.650	--	0.884	1.454	--
New Jersey	2.869	2.855	2.825	2.277	2.855
New Mexico	5.465	1.411	4.227	3.753	4.731
New York	3.114	1.318	1.836	2.591	3.045
North Carolina	3.536	1.793	3.172	3.391	3.543
North Dakota	3.988	--	0.609	3.538	3.197
Ohio	3.974	3.015	4.175	4.063	4.330
Oklahoma	3.858	1.695	1.675	3.744	3.778
Oregon	5.927	1.168	2.820	5.802	3.685
Pennsylvania	2.873	1.845	2.597	2.800	2.598
Rhode Island	1.150	0.035	1.083	1.127	0.035
South Carolina	1.426	1.150	0.004	0.896	0.895
South Dakota	1.863	1.152	1.272	1.153	1.279
Tennessee	4.959	2.829	4.466	5.403	5.173
Texas	3.374	1.601	1.532	3.183	3.233
Utah	3.665	0.086	2.559	3.997	3.994
Vermont	4.732	--	0.590	4.731	2.051
Virginia	3.273	2.667	2.267	2.287	2.888
Washington	11.643	9.928	9.261	10.151	11.047
West Virginia	0.296	0.067	0.279	0.284	0.282
Wisconsin	0.998	0.578	0.472	0.711	0.677
Wyoming	2.669	2.444	2.571	2.704	2.662

-- Too few cases for a reliable estimate.

a) The District of Columbia and Hawaii each have only one school district.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Appendix C

Technical Notes

The Schools and Staffing Survey (SASS), an integrated survey of American schools, school districts, principals, teachers, and student records, is funded by the National Center for Education Statistics (NCES) of the U.S. Department of Education. First conducted during the 1987-88 school year, SASS is designed to provide periodic data on public and private schools in the United States. Since the 1990-91 school year, SASS has also included Indian schools supported by the Bureau of Indian Affairs, U.S. Department of the Interior. Major categories of data collected in SASS include the characteristics of schools and principals, school programs and policies, and the opinions and attitudes of principals about policies and working conditions.

The analytical power of the data is enhanced by the ability to link survey data for individual local education agencies (LEAs), schools, principals, and teachers. The use of comparable questions in each round of SASS makes it possible to monitor changes in the nation's educational system. The first SASS was administered during the 1987-88 school year, with a teacher follow-up survey conducted during 1988-89. The two subsequent SASS administrations were at three-year intervals (1990-91 and 1993-94). The next SASS round is scheduled for 1999-2000. Subsequent administrations are planned for five-year intervals.

The 1993-94 SASS consisted of separate surveys administered simultaneously to linked samples of respondents.¹ These instruments included:

- *Teacher Demand and Shortage Questionnaire for Public School Districts (LEAs)*, which collected information on student enrollment and district programs and policies from public school districts;
- *Public, Private, and Indian School Principal Questionnaires*, which collected information on principals' demographic characteristics, education, experiences, compensation, and perceptions of school problems;
- *Public, Private, and Indian School Questionnaires*, which collected information on school programs and policies, enrollment by grade, student demographic characteristics, and measures of school type;²

¹Since 1987, NCES has published several reports that include these instruments (e.g., NCES Report 94-674, *SASS and PSS Questionnaires, 1993-94*). Copies of the questionnaires may be obtained by writing to NCES Education Surveys Program at the address given on the backside of the title page.

²For instrument development purposes, Indian schools were treated analogously to private schools, which do not typically operate under a district-like administrative structure. So, these instruments also contained several items on personnel policies and administrative practices that were included in the

- *Public, Private, and Indian School Teacher Questionnaires*, which collected information on teachers' education and training, teaching assignments, experience, certification, perceptions and attitudes about teaching, and workplace conditions;
- *Student Records Questionnaire*, which collected student records data from a subsample of students from surveyed schools on demographic information, current enrollment status, educational activities, support services received, and student performance measures (e.g., GPA); and
- *Teacher Follow-up Survey*, which surveyed a sample of teachers one year after the SASS administration, oversampling those who have left the profession, and collected data on activities and plans, attitudes about teaching, and job satisfaction.

The analyses for this report uses only the *Teacher Demand and Shortage Questionnaire for Public School Districts*.³

Overview of the Design of SASS

SASS continues to be the largest and most thorough national integrated survey of districts, schools, principals, and teachers ever undertaken in this country. The target populations for the SASS surveys include elementary and secondary schools, principals and classroom teachers in these schools, former teachers, and the LEAs that are responsible for administering the public schools. The 1993-94 sample consisted of 9,956 public schools and 3,315 private schools.

Evolution of the SASS Design

The first administration of SASS in 1987-88 integrated three existing NCES survey programs: the Teacher Demand and Shortage Survey, the Public and Private School Surveys, and the Teacher Surveys. The 1987-88 SASS included a public school sample of 9,317 schools selected from the Quality Education Data (QED) file of public schools. The private school sample included 3,513 schools selected primarily from the QED file of private schools supplemented with private school association lists and targeted area samples from telephone directories.

Since that first administration, NCES has implemented a number of changes in the survey design and context to improve study estimates and to better reflect changes in the educational environment. Some of the most important changes that relate to this report are highlighted below.⁴

Teacher Demand and Shortage Questionnaire for Public School Districts.

³Also referred to as the Teacher Demand and Shortage Surveys or TDS Surveys.

⁴Additional information on changes in SASS design can be found in Abramson, R., Cole, C., Jackson, B., Parmer, R., and Kaufman, S. (1996). *1993-94 Schools and Staffing Survey: Sample Design and Estimation* (Technical Report NCES 96-089). Washington, DC: U.S. Department of Education, National Center for Education Statistics, Office of Educational Research and Improvement, or Jabine,

- Beginning with the 1990-91 SASS, the sampling frame for public schools was NCES Common Core of Data (CCD), an annual census of LEAs and schools. For the 1990-91 SASS, for public schools, the sampling frame was the 1988-89 CCD; for private schools, the sampling frame was NCES 1989-90 Private School Universe Survey, augmented with state lists and private school association lists. The frame for the 1993-94 SASS for public schools was the 1991-92 CCD; for private schools, the frame was the augmented 1990-91 Private School Universe Survey.

Notably for public schools, the QED and CCD data sources apply slightly different definitions of the school unit. The QED file defined schools in terms of their physical location; the CCD file used for subsequent SASS surveys described schools as "administrative units with principals." Thus, in instances where multiple schools share a single campus, the estimated number of schools increases using the CCD definition.

- Since 1987-88, a number of revisions to the Teacher Demand and Shortage Surveys have been implemented. Question formats and item wordings have changed since 1987-88. We do not attempt to describe these changes here.

Sample Selection

The initial sampling units for SASS were schools.⁵ The sampling structure was designed to provide separate data for public and private schools, with detail by state for the public sector and by private school association for the private sector. After schools were selected, each public and private school in the sample was sent a letter requesting that school personnel provide a list of all teachers in the school. The returned lists, supplemented by telephone follow-up, served as the sampling frame for the teacher survey. The same school sample was used for the public and private school principal survey. Each LEA that administered one or more of the sample schools in the public sector became part of the sample for the *Teacher Demand and Shortage Questionnaire*.

Selection of schools. Since the 1990-91 SASS, the public school sampling frame has been the Common Core of Data (CCD) file. The CCD is based on census data collected annually by NCES from state education agencies and is believed to be the most complete list of public schools available. The frame includes regular public schools, military base schools operated by the Department of Defense, Bureau of Indian Affairs (BIA) schools, and nonregular schools such as special education, vocational, and alternative schools. The public school sampling frame for the 1987-88 SASS was the school file developed by QED.

Selection of local education agencies. All LEAs that had at least one school selected for the school sample were included in the LEA sample for the TDS Surveys. Each Bureau of Indian Affairs and Department of Defense school was defined to be an LEA. Since some LEAs do not operate schools, but hire teachers who teach in schools for other LEAs, samples of LEAs

T.B. (1994). *Quality Profile for SASS: Aspects of the Quality of Data in the Schools and Staffing Surveys (SASS)* (NCES 94-340). Washington, DC: U.S. Department of Education, National Center for Education Statistics, Office of Educational Research and Improvement.

⁵For a detailed description of the sample design for the 1993-94 sample design for the 1993-94 SASS, see Abramson et al., (1996). *1993-94 Schools and Staffing Survey: Sample Design and Estimation*.

without eligible schools were also selected. LEAs in this sample were checked to determine if they were actually in scope (i.e., were an operating public school agency that reported hiring teachers). All LEAs in Delaware, Nevada, and West Virginia were included to reduce high standard errors in these states.

In 1987-88, a sample of 70 LEAs that did not contain eligible schools was selected directly. Only 8 of these 70 were actually in-scope (i.e., reported hiring teachers). The total LEA sample for the 1987-88 school year was 5,592.

For the 1990-91 SASS, a sample of 135 LEAs without eligible schools was selected. Only 14 of the 135 were actually in scope (i.e., were an operating public school agency that reported hiring teachers). The total LEA sample was 5,515.

In 1993-94, a sample of 109 LEAs without eligible schools was selected. Only 5 of the 109 were actually in scope (i.e., were an operating public school agency that reported hiring teachers). The total LEA sample was 5,464.

Survey Operations Procedures

Survey operations for the 1987-88, 1990-91, and 1993-94 SASS, including sample selection, data collection, and data processing, were carried out under an interagency agreement by the U.S. Bureau of the Census, according to specifications provided by NCES. At the start of each school year, introductory letters containing a Teacher Listing Sheet were mailed to sample schools. These Teacher Listing Sheets, designed to enumerate the instructional staff at each school, served as the sampling frame for the teacher sample. Shortly after the listing sheets were distributed, School Principal Questionnaires were sent to the principals of the selected public and private schools. At this time, Teacher Demand and Shortage Questionnaires were mailed to the local education agencies. School Teacher Questionnaires for teachers selected from lists provided by the sample public and private schools were also mailed at this time. Completed questionnaires were returned by mail to the Census Bureau. Telephone follow-up interviews of nonrespondents to the questionnaires were conducted by Census Bureau field representatives.

Weighting

For the Teacher Demand and Shortage Questionnaires, weights were developed to produce national and state estimates for local education agencies.⁶ The basic weights were the inverse of the probability of selection. The weights were also adjusted for nonresponse and to ensure that sample totals (based on responding, nonresponding, and out-of-scope cases) were comparable to the frame totals.

⁶For a detailed description of the weighting process for 1993-94, see Abramson et al., (1996). *1993-94 Schools and Staffing Survey: Sample Design and Estimation*.

Standard Errors

The estimates presented in the text and tables of this report are based on samples and are subject to sampling variability. In the 1987-88 and 1990-91 SASS, standard errors were estimated using a balanced repeated replications procedure that incorporated the design features of this complex sample survey.⁷ In the 1993-94 SASS, a bootstrap procedure was employed to estimate standard errors. The standard errors indicate the accuracy of each estimate. If all possible samples of the same size were surveyed under the same conditions, an interval of 1.96 standard error units below to 1.96 standard error units above a particular statistic would include the true population value in approximately 95 percent of the cases. Note, however, that the standard errors do not take into account the effects of biases due to item nonresponse, measurement error, data processing error, or other possible systematic errors. Standard errors for the estimates presented in the text and tables of this report are included in appendix B.

Accuracy of Estimates

Some districts did not return questionnaires, which resulted in missing data. These missing data, however, should have relatively little impact on the estimates of percentages, means, and counts that this report presents because of nonresponse adjustment strategies employed by SASS.⁸

The accuracy of any statistic is determined by the joint effects of sampling and nonsampling errors. Both types of error affect the estimates presented in this report.⁹

Nonsampling Error

Both universe and sample surveys are subject to nonsampling errors. Two types of nonsampling errors occur—nonobservation error and measurement error—and both are extremely difficult to estimate.

Nonobservation error may be due to noncoverage, which occurs when members of the population of interest are excluded from the sampling frame and, therefore, are not included in the survey sample. Nonobservation error also occurs when sampled units refuse to answer some or all of the survey questions. These types of error are referred to as questionnaire nonresponse (where the entire questionnaire is missing) and item nonresponse (where only some items of the questionnaire are missing). Sample weight adjustment techniques were used to

⁷See, e.g., Wolter, K.M. (1985). *Introduction to Variance Estimation*. New York: Springer-Verlag.

⁸Sampling weights are adjusted for instrument nonresponse.

⁹A summary of the data quality for SASS is presented by Jabine, T.B. (1994). *Quality Profile for SASS: Aspects of the Quality of Data in Schools and Staffing Surveys* (SASS) (NCES 94-340).

compensate for questionnaire nonresponse; imputation procedures were used to compensate for item nonresponse in SASS¹⁰.

Measurement error occurs when mistakes are made when data are edited, coded, or entered into computers (processing errors), when the responses that subjects provide differ from the "true" responses (response errors), and when measurement instruments fail to measure the characteristics they are intended to measure. Sources of response errors include differences in the ways that respondents interpret questions, faulty respondent memory, and mistakes respondents make when recording their answers. Because estimating the magnitude of these various types of nonsampling errors would require special experiments or access to independent data, information on the scope of these errors is seldom available.

Sampling Error

Sampling error occurs when members of a population are selected (sampled), and only sample members respond to survey questions. Estimates that are based on sample responses will differ somewhat from the data that would have been obtained if a complete census of the relevant population had been taken using the same survey instruments, instructions, and procedures. The estimated standard error of a statistic is a measure of the variation due to sampling and can be used to examine the precision obtained in a particular sample. In the 1987-88 and 1990-91 SASS, all estimates and standard errors were calculated using a balanced repeated replications variance estimation program developed to calculate standard errors based upon complex survey designs. In the 1993-94 SASS, a bootstrap variance estimation program was used to calculate standard errors based upon complex survey designs.

Comparability of Estimates

As a result of both nonsampling and sampling error, estimates presented in this report will differ from those prepared using other data files. For example, estimates of the numbers of school districts differ from those provided in summaries of the Common Core of Data (CCD) Survey, a census of the universe of school districts. Overall, estimates of the numbers of school districts (14,987) produced from the Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire) differ from the CCD estimate (15,173) for 1991-92 by about 1 percent. However, estimates of the numbers of districts in a specific state can differ by up to 17 percent. There are many possible reasons for these discrepancies. For example, the Schools and Staffing Surveys and the CCD define "school districts" slightly differently. Districts that do not employ any teachers are considered to be districts and included in the CCD but are excluded from the Schools and Staffing Surveys' sampling frame. Furthermore,

¹⁰A discussion of these nonresponse adjustment procedures is presented in the following references:
Gruber, K.J., Rohr, C.L., and Fondelier, S.E. (1994). *1990-91 Schools and Staffing Survey: Data File User's Manual*. (Vol. 1: *Survey Documentation*). Washington, DC: U.S. Department of Education, National Center for Education Statistics, Office of Educational Research and Improvement.
Gruber, K.J., Rohr, C.L., and Fondelier, S.E. (1996). *1993-94 Schools and Staffing Survey: Data File User's Manual* (Vol. 1: *Survey Documentation*). Washington, DC: U.S. Department of Education, National Center for Education Statistics, Office of Education Research and Improvement.

the sampling frames for the Schools and Staffing Surveys were developed from listings of schools that would be approximately two years old at the time of data collection.¹¹

As a result of nonsampling error, the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire) cannot be used to produce estimates of the number of school districts that existed in 1987-88 that are comparable with those produced in subsequent years. The 1987-88 public school sampling frame was the QED (Quality Education Data) data file; for subsequent SASS, the public school sampling frame was the Common Core of Data (CCD) Survey. There were slight differences in the definition of schools in these sampling frames. More importantly, 275 Nebraska school districts, each of which was comprised of a single elementary school, were excluded from the 1987-88 frame. Accordingly, estimates of the numbers of school districts employing teachers in Nebraska produced from Schools and Staffing Surveys: 1987-88 and 1990-91 (Teacher Demand and Shortage Questionnaires) were 585 in 1987-88 and 811 in 1990-91. According to the CCD, there were 867 regular school districts in Nebraska in 1987-88 and 798 in 1990-91.

Due to sampling error, estimates may appear to differ from those produced from other SASS surveys. The estimated number of students in grades K-12 produced from the Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire) is 42,302,143. The same estimate produced from the Schools and Staffing Survey: 1993-94 (Public School Questionnaire) is 41,621,660. However, these estimates are not statistically significantly different from each other.

Sampling error must be considered when comparing numbers within report tables. In other words, apparent differences may not be statistically significant, particularly when estimates are based on small samples. In order to determine whether apparent differences are statistically significant, statistical procedures (discussed subsequently) must be employed.

Choice Programs

Choice programs, with respect to the data summarized in this report, refer to programs which "allow public school students to enroll in another school or district outside their attendance area without justification based on individual special needs." The types of programs listed in the Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire) as choice programs included magnet schools, enrollment in any school in the district, enrollment in schools in other districts, and enrollment of students from other districts in the state. These types of programs were not defined and could have been interpreted by respondents in different ways. These categories also are not mutually exclusive. For example, there are different types of magnet schools which can be included within any of these choice programs.

¹¹ For a discussion of other possible reasons for these discrepancies, see Gruber, K.J., Rohr, C.L., & Fondelier, S.E. (1996) 1993-94 Schools and Staffing Survey: Data File User's Manual, Volume I: Survey Documentation (NCES 96-142) Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics.

Response Rates and Imputation

The final weighted questionnaire response rates are reported in table C.1 for the various SASS years. Table C.2 provides the item-response rates for the SASS instruments by year. Values were imputed for items with missing data by (1) using data from other items on the questionnaire or a related component of the SASS (e.g., a school record to impute district data); (2) extracting data from the sample frame such as the CCD; or (3) extracting data from a respondent with similar characteristics.¹²

Table C.1— Weighted and unweighted percent response rates by SASS instrument: 1987-88, 1990-91, and 1993-94

Questionnaire	Unweighted			Weighted		
	1987-88	1990-91	1993-94	1987-88	1990-91	1993-94
Teacher demand and shortage for public school districts	89.4	93.7	93.1	90.8	93.5	93.9
Public school principal	94.2	96.9	96.6	94.4	96.7	96.6
Private school principal	81.2	91.1	90.3	79.3	90.0	87.6
Public school	91.9	95.0	92.0	91.9	95.3	92.3
Private school	79.6	85.1	84.1	78.6	83.9	83.2
Public school teacher*	86.5	91.5	88.9	86.4	90.3	88.2
Private school teacher*	77.0	83.1	80.6	79.1	84.3	80.2

*The response rates for public and private school teachers exclude the schools that did not provide teacher lists. The overall or effective response rates for public school teachers, including those that could not be sampled from nonresponding schools, were 83 percent, 86 percent, and 85 percent, respectively, for the 1987-88 through 1993-94 SASS. Overall response rates for private school teachers were 70 percent, 75 percent, and 73 percent for the SASS administrations.

Statistical Procedures

The comparisons in the text were tested for statistical significance to ensure that the differences are larger than might be expected from sampling variation. These statistical tests were based on Student's *t* statistic. Generally, whether a difference is considered significant is determined by calculating a *t* value for the difference between a pair of means or percentages, and comparing this value to published tables of values at certain critical levels, called alpha levels. The alpha level is an *a priori* statement of the probability of inferring that a difference exists when, in fact, it does not (i.e., the observed difference results from sample variation rather than a "true" difference between two means).

¹²For a description of the imputation procedures, see Abramson et al., (1996) *1993-94 Schools and Staffing Survey: Sample Design and Estimation*, pp. 90-108, and Gruber et al., (1994). *1990-91 Schools and Staffing Survey: Data File User's Manual*. (Vol. 1: *Survey Documentation*), pp 71-78.

In order to make proper inferences and interpretations from the statistics, several points must be kept in mind. First, comparisons resulting in large t statistics may appear to merit special note. However, this is not always the case because the size of the t statistic depends not only on the observed difference in means or percentages being compared, but also on the standard error of the difference. Thus, a small difference between two groups with a much smaller standard error could result in a large t statistic, but this small difference is not necessarily noteworthy. Second, when multiple statistical comparisons are made on the same data, it becomes increasingly likely that an indication of a population difference is erroneous. Even when there is no difference in the population, at an alpha level of .05, there is still a 5 percent chance of concluding that an observed t value representing one comparison in the sample is large enough to be statistically significant. As the number of comparisons increases, so does the risk of making such an error in inference.

Table C.2—Unweighted item-response rates for SASS questionnaires, by year

Questionnaire	Range of item-response rates			Percent of items with response rate ≥ 90 percent			Percent of items with a response rate < 75 percent		
	1987-88	1990-91	1993-94	1987-88	1990-91	1993-94	1987-88	1990-91	1993-94
Teacher demand and shortage	40-100%	85-100%	67-100%	74%	90%	91%	12%	0%	1%
Public school principal	70-100	90-100	65-100	86	100	92	2	0	4
Private school principal	71-100	80-100	55-100	89	98	90	2	0	6
Public school	43-100	56-100	83-100	64	77	83	11	1	0
Private school	11-100	67-100	61-100	56	77	77	8	5	3
Public school teacher	64-100	76-100	71-100	90	84	91	1	0	0
Private school teacher	60-100	71-100	69-100	89	79	89	1	1	1

Public School Districts in the United States: 1987-88 to 1993-94

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To guard against errors of inference based upon multiple comparisons, the Bonferroni procedure to correct significance tests for multiple contrasts was used. This method corrects the significance (or alpha) level for the total number of contrasts made with a particular classification variable. For each classification variable, there are $(K*(K-1)/2)$ possible contrasts (or nonredundant pairwise comparisons), where K is the number of categories. For example, region has four categories (i.e., Northeast, Midwest, West, and South). With $K=4$, there are $4*(4-1)/2$ or 6 possible comparisons among the region categories. The Bonferroni procedure divides the alpha level for a single t test by the number of possible pairwise comparisons in order to provide a new alpha that is corrected for the fact that multiple contrasts are being made.

The formula used to compute the t statistic was as follows:

$$t = \frac{P_1 - P_2}{\sqrt{se_1^2 + se_2^2}}$$

where P_1 and P_2 are the estimates to be compared and se_1 and se_2 are their corresponding standard errors. This formula is valid only for independent estimates. When the estimates were not independent (for example, when comparing the percentages of districts of different sizes), a covariance term was added to the denominator of the t -test formula. Because the actual covariance terms were not known, it was assumed that the estimates were perfectly negatively correlated. Consequently, $2*(se_1 * se_2)$ was added to $se_1^2 + se_2^2$ in the t -test formula.

The standard errors were calculated using the replicate weights provided on the SASS Teacher Demand and Shortage data files.

Decision Rules for Suppression of Estimates

Estimates based on small samples generally have large standard errors. Estimates based on fewer than 10 districts were always suppressed. This suppression is indicated by a “--” in the tabular presentation of results. Estimates based on between 10 and 29 districts were suppressed if the coefficient of variation¹³ for the estimate was 20 percent or greater. This suppression is also indicated by a “--” in tables.

However, in tables presenting results by state, results for the District of Columbia and Hawaii are each based on a single district, since both the District of Columbia and Hawaii are comprised of a single LEA. As a single district represents the universe for the District of Columbia and Hawaii, results were not suppressed unless the data item was imputed. This suppression is indicated by a “--”.

¹³The coefficient of the variation is the standard error divided by the value of the statistic calculated.

Variable Definitions

Public School District

A public school district (or LEA) was defined as a government agency administratively responsible for providing public elementary and/or secondary instruction and educational support services. The agency or administrative unit was required to operate under a public board of education. Districts that did not operate schools but hired teachers for other districts were included. A district was considered out of scope if it did not employ elementary or secondary teachers of any kind.

Newly Hired Teachers

Newly hired teachers are teachers employed by the school district in the current (survey) school year, but not the previous year. Besides new graduates, newly hired teachers include teachers returning from unpaid leaves of absence of one or more school year and exclude substitute teachers. Also included are teachers employed by the school district in the current school year who were employed as teachers in other districts or in private schools during the previous year.

Metropolitan (Metro) Status Type

In this report, the variable, Metropolitan (Metro) Status Type, is a categorical variable assigned to every district relative to its metropolitan status. The three categories of Metro Status Type are labeled as follows:

- (1) *Urban area, primarily inside central city;*
- (2) *Urban area, primarily outside central city; and*
- (3) *Nonurban area.*

These categories correspond to the three categories of the Metropolitan Status Code (MSC) on the School District (Teacher Demand and Shortage) file of NCES's Schools and Staffing Survey (SASS), which, in turn correspond to the three categories of the Metropolitan Status Code on the School District Universe file of NCES's Common Core of Data (CCD). CCD files were used as the sampling frames for the 1990-91 and 1993-94 SASSs. The 1991-92 CCD was used as the sampling frame for the 1993-94 SASS and the 1988-89 CCD was used as the sampling frame for the 1990-91 SASS. Therefore, metro status reflects the district's metro status at the time the CCD used for creating the sampling frame was administered.

Since the CCD was not used as the sampling frame for the Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire), there are no metro status codes included in the Schools and Staffing Survey" 1987-88 (Teacher Demand and Shortage Questionnaire) data files. Attempts were made to link Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire) districts with the CCD data file (1985-86 CCD) that could have been used for sample frame construction. For a variety of technical reasons, only 91 percent of the districts could be linked with the CCD. After imputing missing metro status data, it was discovered that CCD data quality efforts in the 1985-86 to 1988-89 period resulted in the reclassification of metro status for hundreds of districts. This

resulted in improved data, but compromised the longitudinal comparability of subsequent metro status data with earlier data. Accordingly, Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Questionnaire) data are not summarized by metro status.

The CCD definition of Metropolitan Status Code is as follows: Metropolitan Status Code (MSC) is the classification of an education agency's service area relative to a Metropolitan Statistical Area (MSA). The agency's classifications are:

- (1) *Primarily serves a central city of an MSA;*
- (2) *Serves an MSA, but not primarily its central city; or*
- (3) *Does not serve an MSA.*

Assignment of a code number to an agency is made by state agency personnel in each state, subject to consultation by CCD survey staff at NCES and the Census Bureau. There are two questions to be answered in making the assignment. The first question is, "Is the agency in an MSA county (or smaller area in New England)?" This is determined by the location of the administrative office given as the address of the education agency. If the agency is not in an MSA county, it is given a code of "3." The second question is, "If the agency is in an MSA, does it primarily serve a central city of the MSA or does it not?" If it primarily serves a central city of the MSA, it is given a code of "1." If it does not, it is given a code of "2."

While it is relatively easy for CCD staff to determine whether or not an agency is in an MSA county or locality by checking with periodic publications produced by OMB, it is not easy to make a judgment about whether or not an agency "primarily serves" a central city of an MSA. This judgment is left to the respondent.

Region

Four geographic regions corresponding to areas defined by the U.S. Bureau of the Census were employed in the report. The areas and states are defined below.

- *Northeast:* Connecticut, Maine, Massachusetts, New Hampshire, New York, New Jersey, Pennsylvania, Rhode Island, and Vermont;
- *South:* Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and the District of Columbia;
- *Midwest:* Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin;
- *West:* Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

District Size

Under 1,000, 1,000 to 9,999, and 10,000 and more. This three category measure of district size is based on the district head count estimates reported in the Teacher Demand and Shortage Questionnaire for Public School Districts.

Minority Students

Under 10 percent, 10 percent to under 50 percent, 50 percent and more. Based on the student demographic information contained in the Teacher Demand and Shortage Questionnaires, the variable is the sum of all racial-ethnic groups other than white non-Hispanic calculated as a percentage of students of all race-ethnic groups.

Minority Teachers

None, more than 0 percent to under 20 percent, 20 percent and more. Based on the teacher demographic information contained in the Teacher Demand and Shortage Questionnaires, the variable is the sum of all racial-ethnic groups other than white non-Hispanic calculated as a percentage of teachers of all race-ethnic groups.

Special Procedures

Inflation adjustments

In order to compare teachers' salaries in 1990-91 with teachers' salaries in 1993-94, adjustments were made to compensate for inflation. These adjustments converted 1990-91 salary dollars into their equivalent purchasing power in 1993-94. The National Center for Education Statistics has adjusted Consumer Price Indices (CPI) on a school-year (July through June) basis.¹⁴ For 1990-91, the adjusted CPI was 133.9; for 1993-94, 146.2. To convert 1990-91 salaries to their equivalent 1993-94 salaries, the 1990-91 salaries were multiplied by (146.2/133.9 = 1.092).

Proportions of Districts

Since the unit of response of the Teacher Demand and Shortage Questionnaires is the school district, many results are presented in terms of the proportions of districts with specific characteristics. The denominator used in calculating these proportions was the total number of districts, whether or not the district served any K-12 children. It should be noted that several LEAs did not serve any K-12 students.¹⁵ The numbers of districts (weighted and unweighted) that did not serve any K-12 students are presented in the following table:

¹⁴U.S. Department of Education, National Center for Education Statistics, Office of Education Research and Improvement (1995). *Digest of Education Statistics 1995*. Washington, DC: Government Printing Office, page 41.

¹⁵Some of these districts enrolled or served prekindergarten students in 1993-94. At least 9 of the 17 districts without K-12 students enrolled prekindergarten students.

Table C.3—Number of districts with zero K-12 students

TDS Survey	Number of districts (unweighted)	Number of districts (weighted)
1987-88	8	82
1990-91	4	29
1993-94	17	45

The numbers of FTE teachers in these districts ranged from 1-73.7 in 1987-88; 4-240.2 in 1990-91; and 5-325 in 1993-94.

For certain tables and figures, such as the proportion of districts with a student test reporting policy (appendix A, table 44 and figure 6.7), the inclusion of districts without students in the proportion's denominator implicitly suggests that it is possible for such districts to have a student test reporting policy. This is clearly not the case. However, to preserve comparability of tables within this report, a common denominator for the calculation of proportions—all districts—was used in this report. Analytic reports might choose to exclude certain types of districts from their analyses. Accordingly, their reports of findings from the SASS Teacher Demand and Shortage Questionnaires might differ from those presented in figures and tables in this report.¹⁶

Choice of second order relationships presented in appendix tables

Appendix tables present all first order relationships (that is, means or percentages for districts according to enrollment, proportions of minority students, proportions of minority teachers, region, and metropolitan status). These tables also present one second order relationship, showing how means or percentages vary as a function of two of these characteristics (for example, for different sized districts in the different regions).

Decisions about which second order relationship to present were made on a chapter-by-chapter basis, with the same second order relationships presented for all tables in a chapter. Analyses were performed to determine the pairs of characteristics for which there were the most significant interactions.

¹⁶For example, the National Center for Education Statistics Issues Brief, *Public School Choice Programs, 1993-94: Availability and Student Participation* (Washington, DC: Government Printing Office, 1996) IB-9-96, excludes districts without students in their calculations of the proportions of districts with different choice programs.

Schools and Staffing Survey (SASS) Data Products

Reports

The Effects of Professionalization on Teachers: A Multi-Level Analysis, 1990-91 (NCES 97-069)

The State of Teaching as a Profession, 1990-91 (NCES 97-104)

Time Spent Teaching Core Academic Subjects in Elementary Schools: Comparisons Across Community School, Teacher, and Student Characteristics (NCES 97-293)

Student Records Questionnaire: School Year 1993-94, With Special Emphasis on American Indians and Alaska Native Students (E.D. Tab, NCES 97-449)

Characteristics of Stayers, Movers, and Leavers: Results from the Teacher Follow-up Survey, 1994-95 (E.D. Tab, NCES 97-450)

Characteristics of American Indian and Alaska Native Education, Results from the 1993-94 DSDD (NCES 97-451)

Public and Private School Principals In The United States: A Statistical Profile, 1987-88 to 1993-94 (NCES 97-455)

A Profile of Administration Policies and Practices for Limited English Proficiency Students: Screening Methods, Teacher Training, and Program Support, 1993-94 (NCES 97-472)

The Schools and Staffing Survey Recommendation for the Future (NCES 97-596)

Out-of-Field Teaching and Educational Equality (NCES 96-040)

Schools and Staffing in the United States: A Statistical Profile: 1993-94 (NCES 96-124)

Private School Universe Survey, 1993-94 (NCES 96-143)

SASS by State, 1993-94 Schools and Staffing Survey: Selected State Results (NCES 96-312)

Comparing Key Organizational Qualities of American Public and Private Secondary Schools (NCES 96-322)

Schools and Staffing in the United States: Selected Data for Public and Private Schools, 1993-94 (E.D. Tab, NCES 95-191)

Reports (continued)

Private Schools in the United States: A Statistical Profile, 1990-91 (NCES 95-330)

Teacher Supply in the U.S.: Sources of Newly Hired Teachers in Public and Private Schools, 1988-1991 (NCES 95-348)

Characteristics of American Indian and Alaska Native Education, Results from the 1990-91 SASS (NCES 95-735)

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- b. "Monitoring Data Quality in Education Surveys"

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